

Charleston County Base Labor Market Analysis



South Carolina
Department of
Commerce
Labor Market Information



August 2009

TABLE OF CONTENTS

EXECUTIVE SUMMARY	5
POPULATION	6
Growth.....	6
LABORSHED.....	7
Characteristics of Workers	7
INCOME	9
Per Capita Income	9
Wages by Industry	10
Wages by Occupation.....	11
EDUCATION	12
High School Graduates.....	12
Higher Education Graduates.....	13
OCCUPATIONS.....	15
Occupational Projections.....	15
Occupational Education Requirements.....	16
INDUSTRY	17
Businesses by Sector.....	17
Growth in Number of Businesses	18
Employment by Sector	19
Industry Analysis	20
MOVING FORWARD.....	21
Appendix A: Occupational Projections	
Appendix B: Businesses by 3-digit NAICS Codes	
Appendix C: Employment by Industry Sector	

EXECUTIVE SUMMARY

Population

Charleston County's population growth has been slower than the state's in recent years.

Future growth is expected to continue to be slower than the state's.

Most of Charleston County's workers live within the county.

Income

Per capita income growth has been faster than in the state and nation.

Charleston County's per capita income has remained above state and surpassed national levels from 1997 to 2007.

Charleston County's average wages are higher than the state's for most major occupation groups.

Education

The number of degrees awarded by area post-secondary institutions has increased.

The greatest increase has been in the area of healthcare.

Occupations

The following occupational groups are expected to have faster growth in Charleston County than in the state:

Management; community and social services; education, training and library; healthcare support; personal care and service; and farming, forestry and fishing.

Requirements for Charleston County's workers are expected to grow in the following levels of education and experience:

Work experience in a related field, postsecondary vocational award, associate's degree, bachelor's degree, and master's degree or higher.

Industry

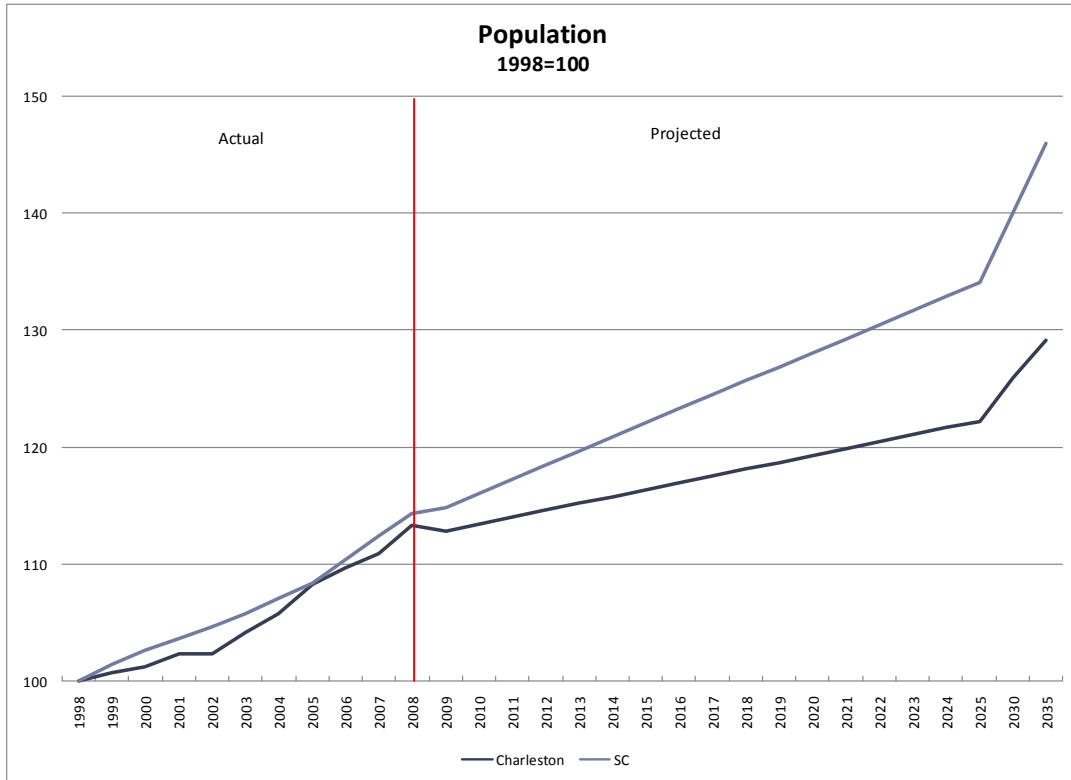
These sectors are rated as having potential in Charleston County:

Building construction; machinery manufacturing; electrical equipment, appliance and component manufacturing; transportation equipment manufacturing; merchant wholesalers; transit and ground passenger transportation; publishing industries; real estate; management of companies and enterprises; and ambulatory health care services.

POPULATION

Growth

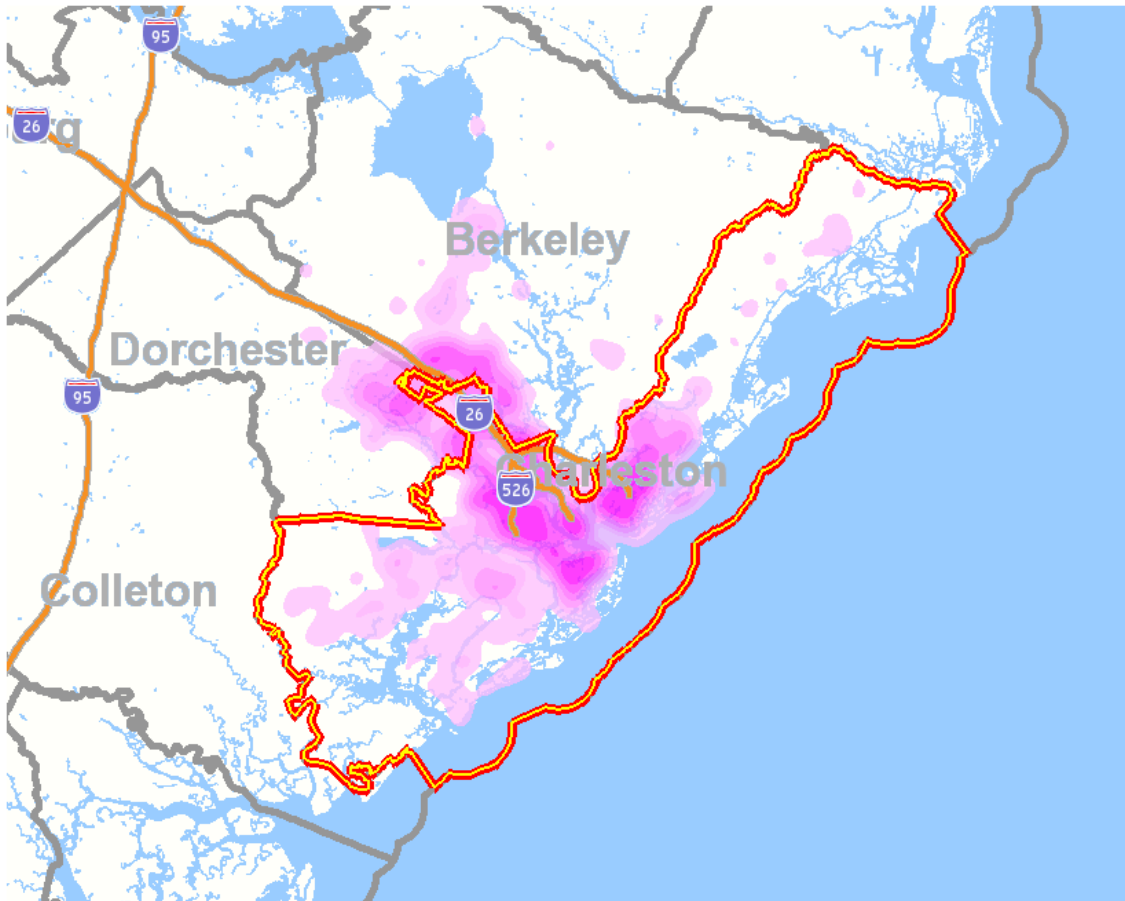
Charleston County's 2008 population was 348,046. The county population has grown by 13.3 % since 1998, compared to 14.3% growth for South Carolina. Charleston's future population growth is expected to continue to be slower than the state's.



Source: U.S. Census Bureau (estimates) and SC Budget & Control Board/Office of Research and Statistics (projections).

LABORSHED

The map below shows where Charleston County workers come from (in 2006, latest available data). Charleston County draws over 60% of its workers from within its borders, and 15% from Berkeley County.



Source: U.S. Census Bureau, Local Employment Dynamics.

Characteristics of Workers

Age of Workers:

30 or younger	29.3%
31 to 54	55.1%
55 or older	15.6%

Earnings of Workers:

\$1,200 per month or less	26.6%
\$1,201 to \$3,400 per month	44.7%
More than \$3,400 per month	28.7%

States Where Workers Live:

South Carolina	99.1%
All other locations	0.9%

Counties Where Workers Live:

Charleston	60.7%
Berkeley	14.9%
Dorchester	9.0%
Richland	2.0%
Horry	1.8%
Lexington	1.3%
Beaufort	1.1%
Colleton	1.0%
Orangeburg	1.0%
Greenville	0.7%
All Other Locations	6.6%

Cities Where Workers Live:

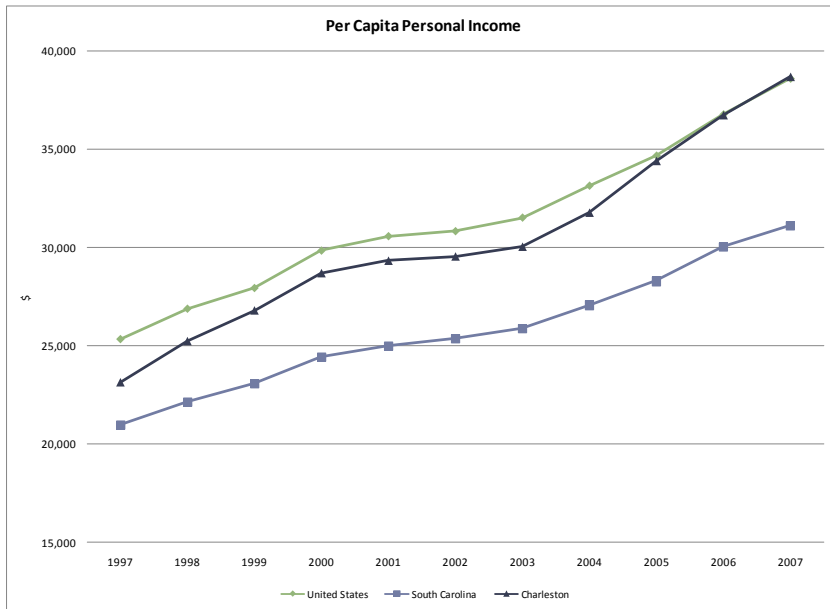
Charleston, SC	20.4%
Mount Pleasant, SC	12.3%
North Charleston, SC	11.8%
Goose Creek, SC	3.2%
Summerville, SC	3.0%
Hanahan, SC	2.0%
Ladson, SC	1.8%
Hollywood, SC	0.7%
Columbia, SC	0.7%
Isle of Palms, SC	0.7%
All Other Locations	43.4%

Source: U.S. Census Bureau, Local Employment Dynamics.

INCOME

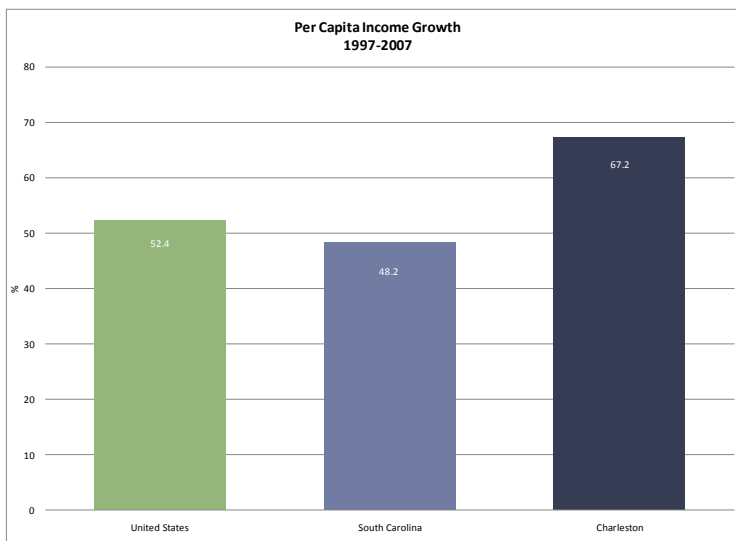
Per Capita Income

Charleston County's per capita income has moved farther ahead of the state level, and has surpassed the national level. Charleston County has the second highest per capita income in South Carolina.



Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Charleston County's per capita income has grown faster than South Carolina's and the nation's due to above-average income growth coupled with slower population growth.



Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Wages by Industry

Charleston County's average wages are above those of South Carolina (\$738 vs. \$697 in 2008). Average wages were up 22% in Charleston County over the past five years, compared to 18% for the state. All major sectors had growth.

Industry	NAICS Code	2008 Average Weekly Wage (\$)	2003 Average Weekly Wage (\$)	% Change
Total, Private and Government		738	604	22
Construction	23	845	657	29
Manufacturing	31-33	1,040	846	23
Retail Trade	44-45	509	459	11
Transportation and Warehousing	48-49	715	662	8
Information	51	904	737	23
Finance and Insurance	52	1,232	942	31
Real Estate and Rental and Leasing	53	740	597	24
Administration & Support & Waste Management & Remediation Services	56	524	378	39
Health Care & Social Assistance	62	847	733	16
Arts, Entertainment, and Recreation	71	398	336	18
Accommodation and Food Services	72	324	273	19
Other Services (Except Public Administration)	81	518	439	18
Federal Government		1,434	1,115	29
State Government		862	683	26
Local Government		700	586	19

Source: U.S. Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

Wages by Occupation

Average wages in Charleston County are higher than the state average in all occupational groups except computer and mathematical, farming and forestry, and production.

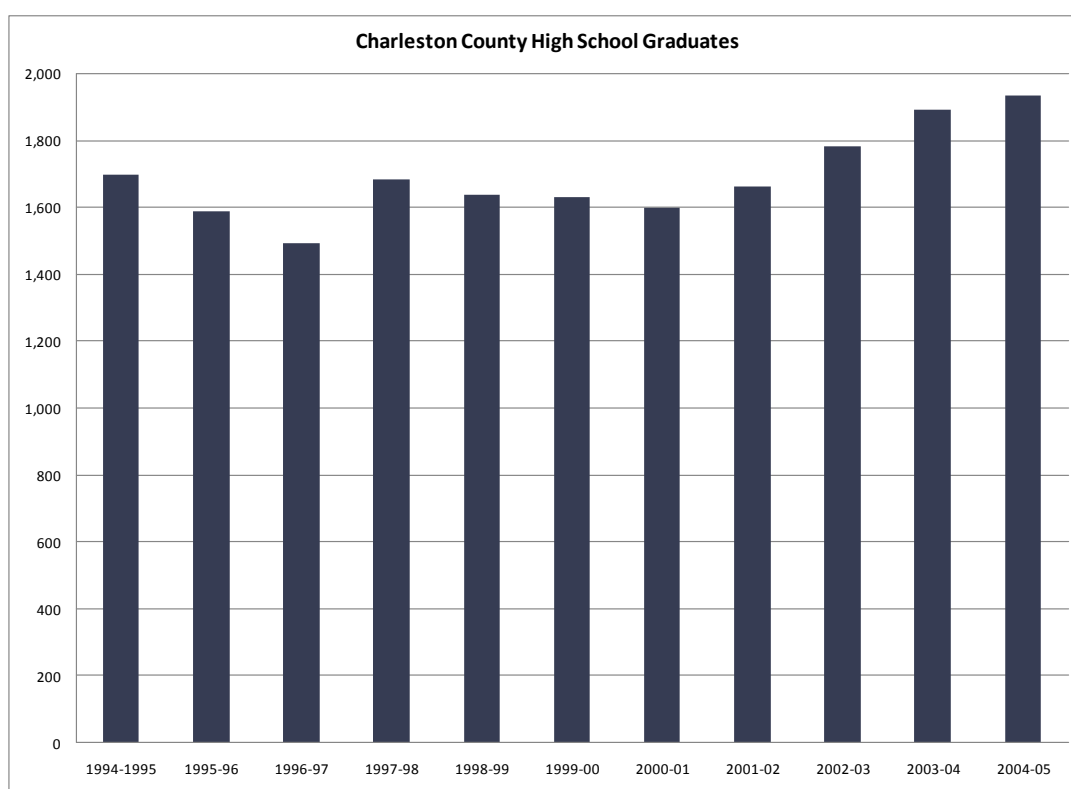
Occupation	2009 Charleston County Median Hourly Wage (\$)	2009 SC Median Hourly Wage (\$)
Management occupations	27.33	23.49
Business and financial operations occupations	20.86	19.14
Computer and mathematical science occupations	24.20	25.83
Architecture and engineering occupations	29.40	28.98
Life, physical and social science occupations	21.51	21.12
Community and social services occupations	13.48	12.94
Legal occupations	27.43	25.39
Education, training and library occupations	22.85	22.66
Arts, design, entertainment, sports and media occupations	13.95	12.27
Healthcare practitioners and technical occupations	30.98	28.56
Healthcare support occupations	12.42	10.74
Protective service occupations	14.50	14.37
Food preparation and serving related occupations	8.83	8.18
Building and grounds cleaning and maintenance occupations	9.17	8.75
Personal care and service occupations	9.59	8.41
Sales and related occupations	11.53	11.00
Office and administrative support occupations	13.67	13.06
Farming, fishing, and forestry occupations	9.32	10.85
Construction and extraction occupations	15.91	14.10
Installation, maintenance and repair occupations	16.59	16.19
Production occupations	14.10	14.75
Transportation and material moving occupations	12.81	12.65

Source: Economic Modeling Specialists, Inc.

EDUCATION

High School Graduates

From 1995 to 2005 (latest data available), the number of Charleston County students receiving high school diplomas rose by 237 (14%). In South Carolina, on the other hand, the number of high school diplomas increased 9% from 1995 to 2005. A total of 1,935 people received high school diplomas in Charleston County in 2005. Charleston County had 283 more 12th grade students in 2004-05 than in 1994-95. Also, the number of Charleston County students not passing the exit exam who received a certificate of completion instead of a diploma was up by 98 (to 156) over the 1995-2005 period.




Source: National Center for Education Statistics.

Higher Education Graduates

Over 2,000 more students graduated from higher educational institutions in the Charleston region in 2007 than in 1997, an increase of 32%. The greatest numerical increase was in the healthcare field.

Program	1997	2007	Change	% Change
Agriculture, agriculture operations, and related sciences	36	8	-28	-78
Area, ethnic, cultural, and gender studies	--	4	--	--
Biological and biomedical sciences	346	377	31	9
Business, management, marketing, and related support services	1,040	1,433	393	38
Communication, journalism, and related programs	191	291	100	52
Communications technologies/technicians and support services	25	25	0	0
Computer and information sciences and support services	153	237	84	55
Construction trades	1	1	0	0
Education	911	713	-198	-22
Engineering technologies/technicians	168	223	55	33
Engineering	67	74	7	10
English language and literature/letters	131	117	-14	-11
Family and consumer sciences/human sciences	140	231	91	65
Foreign languages, literatures, and linguistics	40	123	83	208
Health professions and related clinical sciences	1,307	1,907	600	46
Social sciences and history	444	535	91	20
Legal professions and studies	58	75	17	29
Liberal arts and sciences, general studies and humanities	323	369	46	14
Mathematics and statistics	64	60	-4	-6
Mechanic and repair technologies/technicians	86	164	78	91
Multi/interdisciplinary studies	29	93	64	221
Natural resources and conservation	34	30	-4	-12
Parks, recreation, leisure, and fitness studies	1	66	65	6,500
Personal and culinary services	85	222	137	161
Philosophy and religious studies	39	70	31	79
Physical sciences	78	96	18	23
Precision production	141	54	-87	-62
Psychology	257	309	52	20
Public administration and social service professions	100	110	10	10
Science technologies/technicians	23	13	-10	-43
Security and protective services	116	300	184	159
Theology and religious vocations	4	21	17	425
Visual and performing arts	136	295	159	117
TOTAL	6,574	8,646	2,072	32

Source: National Center for Education Statistics (Integrated Post Secondary Education System).



Data for these schools: Beta Tech, Charleston Southern University, Citadel Military College of South Carolina, Claflin University, College of Charleston, Denmark Technical College, Medical University of South Carolina, Miller-Motte Technical College, Orangeburg Calhoun Technical College, South Carolina State University, Southern Methodist College, Trident Technical College, Voorhees College, Williamsburg Technical College.

OCCUPATIONS

Occupational Projections

The following occupational groups are projected to grow faster in Charleston County than in the state:

- Management
- Community and social services
- Education, training and library
- Healthcare support
- Personal care and service
- Farming, forestry and fishing

See **Appendix A** for detailed occupational information.

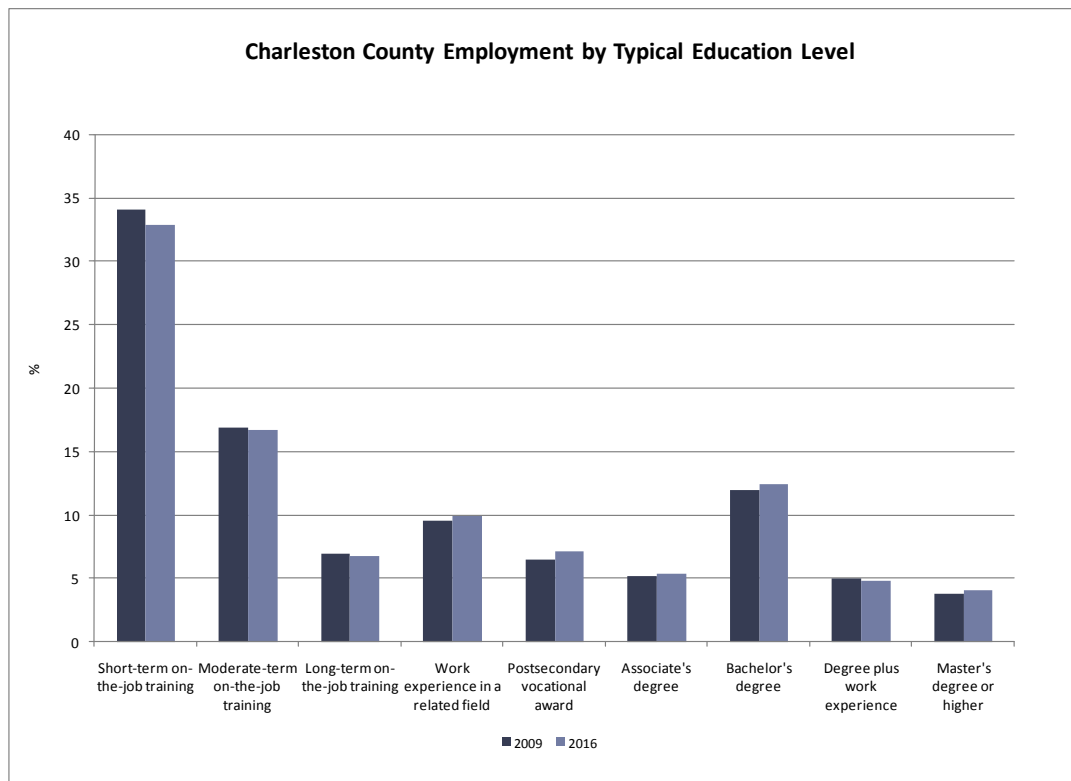
Occupation	2009-2016 Charleston County Projected Growth (%)	2009-2016 SC Projected Growth (%)
Management occupations	15	13
Business and financial operations occupations	11	15
Computer and mathematical science occupations	10	15
Architecture and engineering occupations	7	11
Life, physical and social science occupations	8	10
Community and social services occupations	10	9
Legal occupations	12	17
Education, training and library occupations	15	10
Arts, design, entertainment, sports and media occupations	11	13
Healthcare practitioners and technical occupations	16	17
Healthcare support occupations	25	20
Protective service occupations	8	10
Food preparation and serving related occupations	7	9
Building and grounds cleaning and maintenance occupations	16	18
Personal care and service occupations	9	6
Sales and related occupations	13	16
Office and administrative support occupations	6	8
Farming, fishing and forestry occupations	10	6
Construction and extraction occupations	11	12
Installation, maintenance and repair occupations	8	12
Production occupations	0	-1
Transportation and material moving occupations	5	7

Source: Economic Modeling Specialists, Inc.

Occupational Education Requirements

The trend for occupational growth shows that there will be growth in jobs across skill levels. Based on employment projections, Charleston County is expected to see growth in requirements for the following specific levels of education and experience:

- Work experience in a related field
- Postsecondary vocational award
- Associate's degree
- Bachelor's degree
- Master's degree or higher



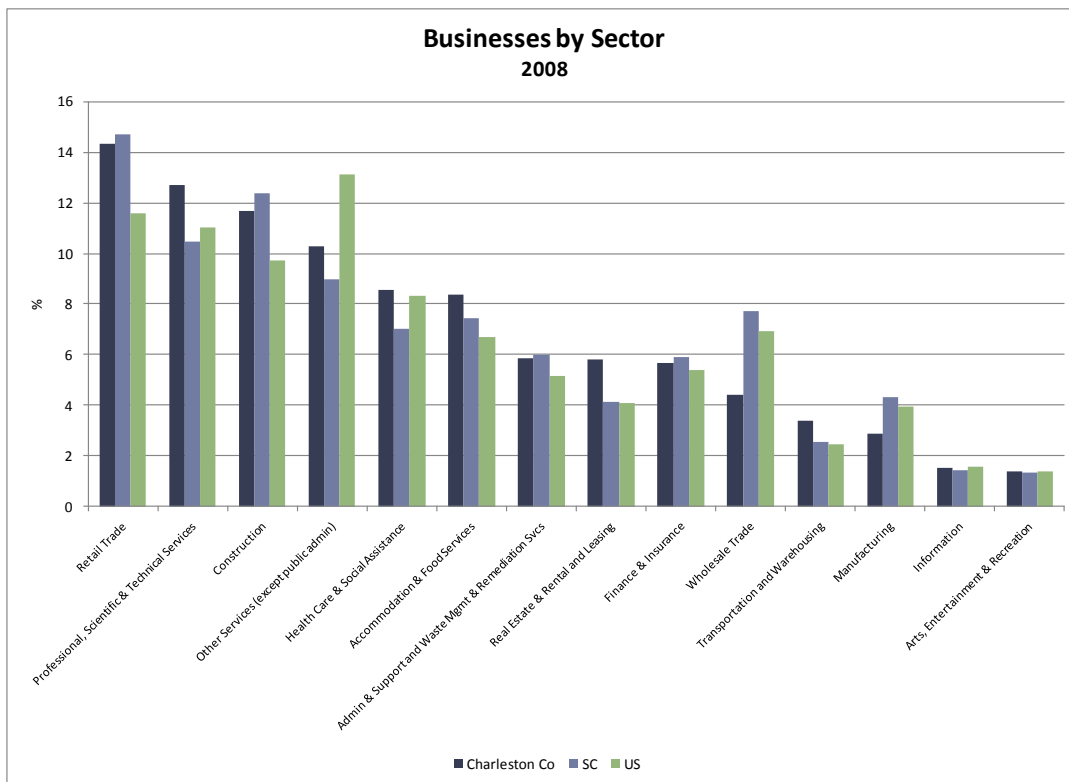
Source: Economic Modeling Specialists, Inc

INDUSTRY

Businesses by Sector

Charleston County had higher percentages of businesses than South Carolina and the nation in the following sectors:

- Professional, scientific and technical services
- Health care and social assistance
- Accommodation and food services
- Real estate and rental and leasing
- Transportation and warehousing
- Arts, entertainment and recreation



Source: U.S. Department of Labor, Bureau of Labor Statistics.

Growth in Number of Businesses

The number of private businesses in Charleston County rose by 4% from 2002 to 2007, compared to a 3% drop for the state. For industry definitions, this analysis uses the North American Industry Classification System (NAICS), the U.S. standard for industry classification.

At the three-digit NAICS code level, Charleston County had higher growth in 19 industries compared to South Carolina and the U.S. Below is a list of those 19 industries along with their respective growth rates.

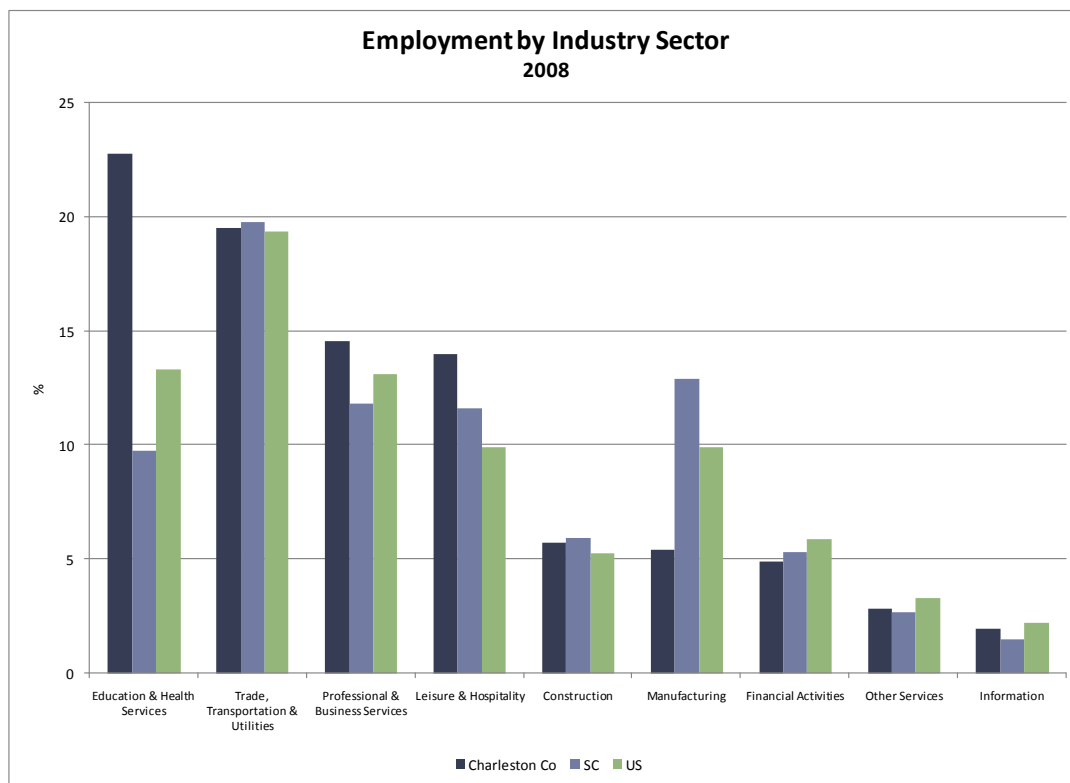
See **Appendix B** for information on all industries.

Industry	2003-2008 Growth (%)		
	Charleston Co.	SC	US
Support Activities for Agriculture and Forestry	12.5	-3.1	2.8
Construction of Buildings	25.8	6.4	12.3
Heavy and Civil Engineering Construction	36.6	4.2	-0.5
Food Manufacturing	15.8	-6.0	-2.1
Textile Product Mills	50.0	2.6	-1.5
Paper Manufacturing	20.0	15.1	-5.7
Chemical Manufacturing	21.7	14.8	5.1
Primary Metal Manufacturing	100.0	18.1	-3.1
Fabricated Metal Product Manufacturing	18.4	0.6	-0.9
Machinery Manufacturing	13.3	-6.8	-8.0
Merchant Wholesalers, Durable Goods	9.1	-5.9	-3.6
Merchant Wholesalers, Nondurable Goods	8.0	-11.3	-3.4
Furniture and Home Furnishings Stores	2.6	-8.7	0.1
Clothing and Clothing Accessories Stores	8.9	-1.9	5.8
Transit and Ground Passenger Transportation	13.6	2.1	4.3
Publishing Industries (except Internet)	18.4	14.9	1.8
Telecommunications	70.7	41.8	9.6
Real Estate	36.6	22.1	18.2
Personal and Laundry Services	7.4	2.2	7.2

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Employment by Sector

Charleston County has a larger than average share of its jobs in education and health services, professional and business services, and leisure and hospitality.



Source: U.S. Department of Labor, Bureau of Labor Statistics.

Industry Analysis

Screening Criteria

Industry sectors were rated on six factors:

- | | |
|------------------------------------|---------------------------------|
| • 2003-2008 employment growth | Competitive effect ¹ |
| • 2003-2008 employment growth rate | Average annual wage |
| • Location quotient ² | Projected growth |

Using those factors, sectors were awarded “stars” based on meeting the following criteria:

- 2003-2008 employment growth of 100 or more (Did the sector add a significant number of jobs?)
- 2003-2008 employment growth rate greater than 14% (overall county job growth over the period) (Did the sector add jobs at an above-average rate?)
- Location quotient of at least 1.25 (Does the sector have a significant concentration in the county?)
- Competitive effect greater than 0 (Did the sector add jobs beyond national growth overall and in the sector?)
- Average annual wage greater than \$38,376 (2008 average for the county) (Does the sector pay wages greater than average for the county?)
- Average or above average projected growth (Is the sector expected to add jobs?)

Industries of Note

Based on these criteria, there were no “six star” sectors in Charleston County. The following were “five star” sectors in Charleston County:

- Construction of buildings (below-average growth projected)
- Machinery manufacturing (location quotient below 1.25)
- Electrical equipment, appliance and component manufacturing (location quotient below 1.25)
- Transportation equipment manufacturing (employment decline projected)
- Merchant wholesalers, durable goods (location quotient below 1.25)
- Merchant wholesalers, nondurable goods (location quotient below 1.25)
- Transit and ground passenger transportation (below-average wage)
- Publishing industries (except Internet) (location quotient below 1.25)
- Real estate (location quotient below 1.25)
- Management of companies and enterprises (location quotient below 1.25)
- Ambulatory health care services (location quotient below 1.25)

Industry sectors that generate wealth from outside the area are referred to as the region’s base economy. Base economy sectors are important to an area’s economic well-being. Building construction, manufacturing, wholesaling, transportation, publishing, and management of companies can be considered base economy industries for Charleston County. Real estate and health care fit the base economy criteria for Charleston County to the extent they involve people moving in from outside the area and the area serving as a regional health care provider, respectively.

Appendix C has information on all factors for all sectors for Charleston County.

¹ *Competitive Effect: based on shift-share analysis; represents the change in employment in the sector in the county after accounting for overall US employment growth and growth/decline in the sector in the US.*

² *Location Quotient: percentage of employment in the sector in the county divided by the percentage of employment in that sector in the US; gives an indication of how concentrated employment in the sector is in the county compared to the US; based on 2008 data.*

MOVING FORWARD

The South Carolina Department of Commerce appreciates the opportunity to provide this base analysis of Charleston County's labor market. We hope that it will help in advancing the progress of Charleston County's economic development.

What's been done so far?

This analysis identifies the region's assets—both current and future—at a macro level. Labor Market Information (LMI) at the S.C. Department of Commerce developed a Base Labor Analysis report providing an overview of the region's population, industries, occupations, and educational assets. Additionally, these findings were benchmarked against the state and the nation.

What's next?

Because local knowledge is required to interpret and apply the findings appropriately, the Charleston Base Labor Analysis should be used with local stakeholders to identify and define key, targeted industry clusters. Some items to consider when defining these clusters may include the following.

1. *What is Charleston's economic base?*

In order for an economy to grow, it must have a base (export) sector that generates wealth from beyond its borders. Industries in the economic base (manufacturing, scientific and technology services, warehouse and distribution, financial services, regional healthcare, etc.) typically provide occupations with higher pay and benefits as well as better human capital development and promotion opportunities. A successful economic base stimulates the development of the non-base sector (housing, schools, retail, restaurants, personal services, etc.). It also propels the local tax base which, in turn, provides support to community services.

2. *What are strategies to assist low-wage citizens in non-base economy jobs?*

Although the economic base is the driver for long-term growth in a region, implementable strategies for developing job opportunities for low-skilled individuals is a priority for community economic well-being. This need must also be kept in mind when defining target industry clusters.

3. *What other factors are vital to Charleston and its community?*

Over and above pure economic considerations, what is important to the citizens of the Charleston community? How does Charleston want to be perceived? What quality of life issues affect Charleston? These questions may impact the types of industries desired for the area.

How Labor Market Information at the S.C. Department of Commerce can help.

Once local stakeholders have identified key industry clusters vital to the future economic development of the region, LMI can provide more in-depth analysis of each of these industries, their occupations, business establishments, and educational requirements.

1. Detailed Industry Analysis

For each identified industry, LMI can develop a detailed analysis of each sector, including employment, projected growth, staffing patterns, location quotients, and employers. Additionally, the analysis will examine the largest, fastest growing, and declining sectors within the industry cluster.

2. Detailed Occupational Analysis

At this point, the occupations—classified by SOC codes—that make up each of the identified industry clusters can be analyzed in detail. This analysis will include employment, average earnings, educational requirements, projected growth, and completers from available local training programs. It will culminate in identifying gaps between the number of occupations required to sustain and advance industry growth and the number of skilled workers (as identified by educational requirements and program completers) available to fulfill these positions.

3. Identification of Implementable Recommendations

LMI will utilize the findings of the analyses to develop a set of implementable recommendations. These may include recommendations to align community college programs with economic development goals along with others. Finally, local knowledge will once again be called upon to review the findings and develop an action plan for the implementation of feasible solutions.

Appendix A: Occupational Projections for Charleston County

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
11-1011	Chief executives	1,846	2,089	243	13	1.03	39.49	Degree plus work experience
11-1021	General and operations managers	3,121	3,185	64	2	1.11	37.73	Degree plus work experience
11-1031	Legislators	167	179	12	7	1.66	9.66	Degree plus work experience
11-2011	Advertising and promotions managers	105	113	8	8	1.30	26.48	Degree plus work experience
11-2021	Marketing managers	249	279	30	12	0.75	32.75	Degree plus work experience
11-2022	Sales managers	545	586	41	8	0.93	38.53	Degree plus work experience
11-2031	Public relations managers	175	201	26	15	1.78	33.65	Degree plus work experience
11-3011	Administrative services managers	402	439	37	9	1.00	31.14	Degree plus work experience
11-3021	Computer and information systems managers	388	425	37	10	0.82	40.34	Degree plus work experience
11-3031	Financial managers	957	1,057	100	10	0.93	31.86	Degree plus work experience

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
11-3041	Compensation and benefits managers	38	43	5	13	0.54	32.31	Degree plus work experience
11-3042	Training and development managers	63	71	8	13	1.11	33.62	Degree plus work experience
11-3049	Human resources managers, all other	78	85	7	9	0.74	33.26	Degree plus work experience
11-3051	Industrial production managers	154	147	-7	-5	0.66	37.14	Work experience in a related field
11-3061	Purchasing managers	77	78	1	1	0.73	42.01	Degree plus work experience
11-3071	Transportation, storage, and distribution managers	134	139	5	4	0.82	32.10	Work experience in a related field
11-9011	Farm, ranch, and other agricultural managers	110	126	16	15	0.13	11.13	Degree plus work experience
11-9012	Farmers and ranchers	227	223	-4	-2	0.08	6.56	Long-term on-the-job training
11-9021	Construction managers	1,137	1,315	178	16	1.01	23.79	Bachelor's degree
11-9031	Education administrators, preschool and child care center/program	106	127	21	20	0.68	13.99	Degree plus work experience
11-9032	Education administrators, elementary and secondary school	332	368	36	11	0.81	43.26	Degree plus work experience

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
11-9033	Education administrators, postsecondary	166	200	34	20	0.74	24.93	Degree plus work experience
11-9039	Education administrators, all other	116	132	16	14	1.15	22.09	Degree plus work experience
11-9041	Engineering managers	224	241	17	8	0.79	44.74	Degree plus work experience
11-9051	Food service managers	683	790	107	16	0.96	17.85	Work experience in a related field
11-9061	Funeral directors	31	26	-5	-16	0.63	21.25	Associate's degree
11-9081	Lodging managers	303	430	127	42	1.36	22.12	Work experience in a related field
11-9111	Medical and health services managers	617	693	76	12	1.21	37.74	Degree plus work experience
11-9121	Natural sciences managers	53	53	0	0	0.73	47.81	Degree plus work experience
11-9131	Postmasters and mail superintendents	21	22	1	5	0.53	31.97	Work experience in a related field
11-9141	Property, real estate, and community association managers	2,645	3,715	1,070	40	1.40	8.40	Bachelor's degree
11-9151	Social and community service managers	157	180	23	15	0.61	23.28	Bachelor's degree
11-9199	Managers, all other	1,590	1,849	259	16	0.62	14.50	Work experience in a related field

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
13-1011	Agents and business managers of artists, performers, and athletes	49	61	12	24	0.62	6.92	Degree plus work experience
13-1021	Purchasing agents and buyers, farm products	61	57	-4	-7	2.06	22.32	Work experience in a related field
13-1022	Wholesale and retail buyers, except farm products	232	230	-2	-1	0.90	23.24	Work experience in a related field
13-1023	Purchasing agents, except wholesale, retail, and farm products	411	410	-1	0	0.89	23.87	Work experience in a related field
13-1031	Claims adjusters, examiners, and investigators	258	251	-7	-3	0.54	21.73	Long-term on-the-job training
13-1032	Insurance appraisers, auto damage	39	41	2	5	0.68	15.64	Long-term on-the-job training
13-1041	Compliance officers, except agriculture, construction, health and safety, and transportation	683	677	-6	-1	1.75	22.03	Long-term on-the-job training
13-1051	Cost estimators	431	503	72	17	1.22	23.52	Work experience in a related field
13-1061	Emergency management specialists	35	38	3	9	1.26	23.60	Work experience in a related field
13-1071	Employment, recruitment, and placement specialists	263	287	24	9	0.78	16.53	Bachelor's degree
13-1072	Compensation, benefits, and job analysis specialists	148	168	20	14	0.71	17.87	Bachelor's degree
13-1073	Training and development specialists	289	325	36	12	0.81	20.18	Bachelor's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
13-1079	Human resources, training, and labor relations specialists, all other	268	301	33	12	0.69	21.63	Bachelor's degree
13-1081	Logisticians	315	325	10	3	2.00	31.90	Bachelor's degree
13-1111	Management analysts	1,860	1,988	128	7	1.15	23.48	Degree plus work experience
13-1121	Meeting and convention planners	144	163	19	13	1.18	12.56	Bachelor's degree
13-1199	Business operation specialists, all other	841	952	111	13	0.50	26.28	Bachelor's degree
13-2011	Accountants and auditors	2,437	2,703	266	11	0.98	21.82	Bachelor's degree
13-2021	Appraisers and assessors of real estate	996	1,390	394	40	1.48	8.82	Postsecondary vocational award
13-2031	Budget analysts	87	90	3	3	0.84	27.43	Bachelor's degree
13-2041	Credit analysts	115	108	-7	-6	1.04	32.19	Bachelor's degree
13-2051	Financial analysts	271	338	67	25	0.44	13.34	Bachelor's degree
13-2052	Personal financial advisors	841	1,068	227	27	0.74	13.35	Bachelor's degree
13-2053	Insurance underwriters	113	99	-14	-12	0.67	24.48	Bachelor's degree
13-2061	Financial examiners	29	32	3	10	0.50	27.11	Bachelor's degree
13-2071	Loan counselors	75	79	4	5	0.99	15.10	Bachelor's degree
13-2072	Loan officers	347	358	11	3	0.67	30.53	Bachelor's degree
13-2081	Tax examiners, collectors, and revenue agents	53	54	1	2	0.50	21.89	Bachelor's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
13-2082	Tax preparers	265	240	-25	-9	1.51	11.97	Moderate-term on-the-job training
13-2099	Financial specialists, all other	177	171	-6	-3	0.68	29.20	Bachelor's degree
15-1011	Computer and information scientists, research	153	163	10	7	1.47	28.71	Doctoral degree
15-1021	Computer programmers	1,045	986	-59	-6	1.43	22.69	Bachelor's degree
15-1031	Computer software engineers, applications	288	346	58	20	0.33	29.27	Bachelor's degree
15-1032	Computer software engineers, systems software	526	602	76	14	0.79	26.01	Bachelor's degree
15-1041	Computer support specialists	754	809	55	7	0.83	18.10	Associate's degree
15-1051	Computer systems analysts	688	802	114	17	0.81	25.55	Bachelor's degree
15-1061	Database administrators	234	270	36	15	1.19	22.83	Bachelor's degree
15-1071	Network and computer systems administrators	512	590	78	15	0.93	23.10	Bachelor's degree
15-1081	Network systems and data communications analysts	508	645	137	27	1.02	26.03	Bachelor's degree
15-1099	Computer specialists, all other	255	279	24	9	0.70	31.25	Associate's degree
15-2011	Actuaries	24	26	2	8	0.68	32.12	Degree plus work experience
15-2031	Operations research analysts	96	100	4	4	0.93	27.33	Master's degree
15-2041	Statisticians	46	47	1	2	1.20	21.33	Master's degree
17-1011	Architects, except landscape and naval	312	346	34	11	1.35	24.53	Bachelor's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
17-1012	Landscape architects	114	125	11	10	1.22	21.97	Bachelor's degree
17-1021	Cartographers and photogrammetrists	23	24	1	4	0.86	20.94	Bachelor's degree
17-1022	Surveyors	134	153	19	14	1.45	20.77	Bachelor's degree
17-2011	Aerospace engineers	13	13	0	0	0.12	35.14	Bachelor's degree
17-2041	Chemical engineers	22	24	2	9	0.44	37.94	Bachelor's degree
17-2051	Civil engineers	486	542	56	12	1.02	30.99	Bachelor's degree
17-2061	Computer hardware engineers	201	209	8	4	1.66	32.24	Bachelor's degree
17-2071	Electrical engineers	225	245	20	9	0.93	36.58	Bachelor's degree
17-2072	Electronics engineers, except computer	467	460	-7	-1	2.05	40.97	Bachelor's degree
17-2081	Environmental engineers	113	129	16	14	1.31	35.78	Bachelor's degree
17-2111	Health and safety engineers, except mining safety engineers and inspectors	41	44	3	7	0.98	20.83	Bachelor's degree
17-2112	Industrial engineers	264	303	39	15	0.82	32.29	Bachelor's degree
17-2131	Materials engineers	23	23	0	0	0.60	29.85	Bachelor's degree
17-2141	Mechanical engineers	329	354	25	8	0.92	36.15	Bachelor's degree
17-2161	Nuclear engineers	84	82	-2	-2	1.41	32.47	Bachelor's degree
17-2199	Engineers, all other	147	151	4	3	0.51	32.77	Bachelor's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
17-3011	Architectural and civil drafters	197	201	4	2	1.08	22.77	Postsecondary vocational award
17-3012	Electrical and electronics drafters	59	63	4	7	0.99	23.59	Postsecondary vocational award
17-3013	Mechanical drafters	63	67	4	6	0.53	23.43	Postsecondary vocational award
17-3019	Drafters, all other	11	12	1	9	0.27	20.84	Postsecondary vocational award
17-3022	Civil engineering technicians	169	181	12	7	1.22	19.67	Associate's degree
17-3023	Electrical and electronic engineering technicians	573	593	20	3	2.28	28.10	Associate's degree
17-3024	Electro-mechanical technicians	14	15	1	7	0.48	22.27	Associate's degree
17-3025	Environmental engineering technicians	56	61	5	9	1.56	21.94	Associate's degree
17-3026	Industrial engineering technicians	104	116	12	12	0.98	23.70	Associate's degree
17-3027	Mechanical engineering technicians	95	105	10	11	1.33	23.93	Associate's degree
17-3029	Engineering technicians, except drafters, all other	31	31	0	0	0.27	23.11	Associate's degree
17-3031	Surveying and mapping technicians	198	221	23	12	1.54	16.02	Moderate-term on-the-job training
19-1012	Food scientists and technologists	18	18	0	0	0.85	24.11	Bachelor's degree
19-1013	Soil and plant Scientists	13	14	1	8	0.57	29.49	Bachelor's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
19-1021	Biochemists and biophysicists	37	40	3	8	0.93	27.72	Doctoral degree
19-1022	Microbiologists	14	16	2	14	0.49	20.43	Doctoral degree
19-1023	Zoologists and wildlife biologists	65	67	2	3	1.94	22.81	Bachelor's degree
19-1029	Biological scientists, all other	97	95	-2	-2	1.92	31.33	Bachelor's degree
19-1031	Conservation scientists	36	37	1	3	0.98	27.31	Bachelor's degree
19-1032	Foresters	32	34	2	6	1.25	23.82	Bachelor's degree
19-1041	Epidemiologists	14	16	2	14	1.28	26.58	Master's degree
19-1042	Medical scientists, except epidemiologists	22	27	5	23	0.13	14.77	Doctoral degree
19-1099	Life scientists, all other	13	14	1	8	0.63	30.26	Bachelor's degree
19-2012	Physicists	12	11	-1	-8	0.46	22.62	Doctoral degree
19-2021	Atmospheric and space scientists	34	34	0	0	1.45	30.34	Bachelor's degree
19-2031	Chemists	111	112	1	1	0.86	29.23	Bachelor's degree
19-2041	Environmental scientists and specialists, including health	69	77	8	12	0.48	25.37	Master's degree
19-2042	Geoscientists, except hydrologists and geographers	70	78	8	11	1.02	18.33	Master's degree
19-2043	Hydrologists	27	29	2	7	0.88	23.96	Master's degree
19-2099	Physical scientists, all other	40	44	4	10	0.66	24.52	Bachelor's degree
19-3011	Economists	16	16	0	0	0.66	27.34	Master's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
19-3021	Market research analysts	205	229	24	12	0.49	22.70	Bachelor's degree
19-3022	Survey researchers	70	75	5	7	0.78	15.97	Bachelor's degree
19-3031	Clinical, counseling, and school psychologists	195	220	25	13	0.68	22.20	Doctoral degree
19-3032	Industrial-organizational psychologists	94	109	15	16	0.73	15.73	Master's degree
19-3039	Psychologists, all other	103	117	14	14	0.73	18.10	Master's degree
19-3051	Urban and regional planners	51	57	6	12	0.86	23.59	Master's degree
19-3099	Social scientists and related workers, all other	24	24	0	0	0.50	27.16	Master's degree
19-4011	Agricultural and food science technicians	31	36	5	16	0.84	16.64	Associate's degree
19-4021	Biological technicians	103	115	12	12	0.86	18.00	Associate's degree
19-4031	Chemical technicians	115	108	-7	-6	1.14	17.20	Associate's degree
19-4041	Geological and petroleum technicians	11	12	1	9	0.43	16.64	Associate's degree
19-4051	Nuclear technicians	173	177	4	2	11.39	18.33	Associate's degree
19-4061	Social science research assistants	12	14	2	17	0.35	12.96	Associate's degree
19-4091	Environmental science and protection technicians, including health	82	93	11	13	1.44	17.78	Associate's degree
19-4092	Forensic science technicians	16	20	4	25	0.64	15.33	Associate's degree
19-4093	Forest and conservation technicians	49	48	-1	-2	0.92	15.11	Associate's degree
19-4099	Life, physical, and social science technicians, all other	34	38	4	12	0.34	16.34	Associate's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
21-1011	Substance abuse and behavioral disorder counselors	52	60	8	15	0.32	18.02	Master's degree
21-1012	Educational, vocational, and school counselors	371	423	52	14	0.84	20.54	Master's degree
21-1013	Marriage and family therapists	27	32	5	19	0.37	10.00	Master's degree
21-1014	Mental health counselors	43	49	6	14	0.21	11.29	Master's degree
21-1015	Rehabilitation counselors	359	388	29	8	1.66	13.55	Master's degree
21-1019	Counselors, all other	26	31	5	19	0.33	9.23	Master's degree
21-1021	Child, family, and school social workers	587	646	59	10	1.18	15.55	Bachelor's degree
21-1022	Medical and public health social workers	278	319	41	15	1.17	19.94	Bachelor's degree
21-1023	Mental health and substance abuse social workers	77	86	9	12	0.31	13.92	Master's degree
21-1029	Social workers, all other	415	444	29	7	3.05	16.56	Bachelor's degree
21-1091	Health educators	46	54	8	17	0.41	16.64	Master's degree
21-1092	Probation officers and correctional treatment specialists	71	82	11	15	0.46	15.64	Bachelor's degree
21-1093	Social and human service assistants	655	720	65	10	1.09	9.63	Moderate-term on-the-job training
21-1099	Community and social service specialists, all other	123	140	17	14	0.60	11.58	Bachelor's degree
21-2011	Clergy	475	496	21	4	1.11	8.06	Master's degree
21-2021	Directors, religious activities and education	215	226	11	5	1.08	7.84	Bachelor's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
21-2099	Religious workers, all other	101	107	6	6	1.06	6.91	Bachelor's degree
23-1011	Lawyers	1,210	1,328	118	10	0.90	35.87	First professional degree
23-1022	Arbitrators, mediators, and conciliators	11	12	1	9	0.63	16.67	Degree plus work experience
23-1023	Judges, magistrate judges, and magistrates	66	72	6	9	1.65	19.61	Degree plus work experience
23-2011	Paralegals and legal assistants	877	1,006	129	15	2.11	19.85	Associate's degree
23-2091	Court reporters	46	57	11	24	0.68	16.44	Postsecondary vocational award
23-2092	Law clerks	64	74	10	16	0.73	16.56	Bachelor's degree
23-2093	Title examiners, abstractors, and searchers	148	154	6	4	1.12	19.03	Moderate-term on-the-job training
23-2099	Legal support workers, all other	57	67	10	18	0.55	19.40	Bachelor's degree
25-1099	Postsecondary teachers	2,237	2,837	600	27	0.80	30.01	Doctoral degree
25-2011	Preschool teachers, except special education	642	771	129	20	0.72	9.53	Postsecondary vocational award
25-2012	Kindergarten teachers, except special education	280	323	43	15	0.85	29.46	Bachelor's degree
25-2021	Elementary school teachers, except special education	2,253	2,557	304	13	0.86	27.03	Bachelor's degree
25-2022	Middle school teachers, except special and vocational education	1,022	1,145	123	12	0.91	26.78	Bachelor's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
25-2023	Vocational education teachers, middle school	102	103	1	1	1.45	23.84	Degree plus work experience
25-2031	Secondary school teachers, except special and vocational education	1,439	1,559	120	8	0.81	29.48	Bachelor's degree
25-2032	Vocational education teachers, secondary school	101	102	1	1	0.58	30.21	Degree plus work experience
25-2041	Special education teachers, preschool, kindergarten, and elementary school	185	218	33	18	0.49	28.60	Bachelor's degree
25-2042	Special education teachers, middle school	94	107	13	14	0.55	27.29	Bachelor's degree
25-2043	Special education teachers, secondary school	179	197	18	10	0.73	24.80	Bachelor's degree
25-3011	Adult literacy, remedial education, and GED teachers and instructors	178	211	33	19	0.71	11.85	Bachelor's degree
25-3021	Self-enrichment education teachers	511	596	85	17	1.09	10.55	Work experience in a related field
25-3099	Teachers and instructors, all other	446	509	63	14	0.42	14.37	Bachelor's degree
25-4011	Archivists	18	19	1	6	1.31	14.48	Master's degree
25-4012	Curators	34	33	-1	-3	1.57	13.92	Master's degree
25-4013	Museum Technicians and Conservators	11	11	0	0	0.50	12.30	Master's degree
25-4021	Librarians	289	311	22	8	1.09	21.11	Master's degree
25-4031	Library technicians	259	285	26	10	1.33	11.89	Postsecondary vocational award

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
25-9011	Audio-visual collections specialists	37	37	0	0	1.66	12.05	Moderate-term on-the-job training
25-9031	Instructional coordinators	237	286	49	21	1.08	22.88	Master's degree
25-9041	Teacher assistants	1,656	1,865	209	13	0.73	11.95	Short-term on-the-job training
25-9099	Education, training, and library workers, all other	42	48	6	14	0.23	10.33	Bachelor's degree
27-1011	Art directors	135	163	28	21	0.67	7.73	Degree plus work experience
27-1012	Craft artists	117	141	24	21	0.77	6.61	Long-term on-the-job training
27-1013	Fine artists, including painters, sculptors, and illustrators	127	153	26	20	0.80	7.27	Long-term on-the-job training
27-1014	Multi-media artists and animators	137	167	30	22	0.69	7.56	Bachelor's degree
27-1019	Artists and related workers, all other	120	145	25	21	0.77	6.98	Long-term on-the-job training
27-1021	Commercial and industrial designers	79	90	11	14	0.68	18.30	Bachelor's degree
27-1022	Fashion designers	60	69	9	15	0.64	17.38	Associate's degree
27-1023	Floral designers	205	199	-6	-3	1.37	13.70	Moderate-term on-the-job training
27-1024	Graphic designers	425	485	60	14	1.04	17.72	Bachelor's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
27-1025	Interior designers	164	196	32	20	1.10	16.37	Associate's degree
27-1026	Merchandise displayers and window trimmers	109	122	13	12	0.67	14.84	Moderate-term on-the-job training
27-1027	Set and exhibit designers	75	85	10	13	0.94	15.52	Bachelor's degree
27-1029	Designers, all other	59	69	10	17	0.69	17.36	Bachelor's degree
27-2011	Actors	82	97	15	18	0.54	8.23	Long-term on-the-job training
27-2012	Producers and directors	401	397	-4	-1	1.97	23.40	Degree plus work experience
27-2021	Athletes and sports competitors	51	63	12	24	0.70	9.25	Long-term on-the-job training
27-2022	Coaches and scouts	223	267	44	20	0.65	20.24	Long-term on-the-job training
27-2023	Umpires, referees, and other sports officials	57	70	13	23	0.81	7.16	Long-term on-the-job training
27-2031	Dancers	29	33	4	14	0.88	9.11	Long-term on-the-job training
27-2032	Choreographers	29	32	3	10	0.81	8.71	Work experience in a related field
27-2041	Music directors and composers	245	289	44	18	0.87	6.58	Degree plus work experience

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
27-2042	Musicians and singers	542	609	67	12	1.37	7.03	Long-term on-the-job training
27-2099	Entertainers and performers, sports and related workers, all other	102	117	15	15	0.63	7.10	Long-term on-the-job training
27-3011	Radio and television announcers	181	128	-53	-29	2.34	13.82	Long-term on-the-job training
27-3012	Public address system and other announcers	25	30	5	20	0.66	10.41	Long-term on-the-job training
27-3021	Broadcast news analysts	18	22	4	22	0.63	9.66	Degree plus work experience
27-3022	Reporters and correspondents	157	165	8	5	1.74	15.38	Degree plus work experience
27-3031	Public relations specialists	436	496	60	14	0.94	18.85	Bachelor's degree
27-3041	Editors	194	222	28	14	0.79	20.86	Bachelor's degree
27-3042	Technical writers	82	92	10	12	0.88	22.50	Bachelor's degree
27-3043	Writers and authors	434	528	94	22	0.77	6.97	Bachelor's degree
27-3091	Interpreters and translators	180	200	20	11	0.81	17.72	Long-term on-the-job training
27-3099	Media and communication workers, all other	149	161	12	8	0.74	18.00	Long-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
27-4011	Audio and video equipment technicians	115	128	13	11	1.39	12.05	Long-term on-the-job training
27-4012	Broadcast technicians	48	45	-3	-6	0.80	11.65	Associate's degree
27-4014	Sound engineering technicians	24	23	-1	-4	0.68	12.10	Postsecondary vocational award
27-4021	Photographers	964	1,032	68	7	0.84	15.35	Long-term on-the-job training
27-4031	Camera operators, television, video, and motion picture	123	108	-15	-12	2.70	12.94	Moderate-term on-the-job training
27-4032	Film and video editors	25	23	-2	-8	0.54	13.06	Bachelor's degree
27-4099	Media and communication equipment workers, all other	34	34	0	0	0.87	29.41	Moderate-term on-the-job training
29-1011	Chiropractors	132	204	72	55	1.37	36.42	First professional degree
29-1021	Dentists, general	151	174	23	15	0.98	72.85	First professional degree
29-1022	Oral and maxillofacial surgeons	18	21	3	17	0.67	32.54	First professional degree
29-1023	Orthodontists	24	27	3	13	0.86	43.63	First professional degree
29-1024	Prosthodontists	18	21	3	17	0.87	30.23	First professional degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
29-1029	Dentists, all other specialists	18	21	3	17	0.68	31.30	First professional degree
29-1031	Dietitians and nutritionists	128	137	9	7	1.11	22.30	Bachelor's degree
29-1041	Optometrists	73	87	14	19	0.90	36.95	First professional degree
29-1051	Pharmacists	601	694	93	15	1.40	53.11	First professional degree
29-1069	Physicians and surgeons	1,572	1,676	104	7	1.16	70.44	First professional degree
29-1071	Physician assistants	96	112	16	17	0.79	36.70	Bachelor's degree
29-1081	Podiatrists	40	45	5	13	0.69	23.76	First professional degree
29-1111	Registered nurses	7,399	8,442	1,043	14	1.80	28.89	Associate's degree
29-1121	Audiologists	23	27	4	17	0.71	23.00	First professional degree
29-1122	Occupational therapists	175	229	54	31	1.00	28.23	Master's degree
29-1123	Physical therapists	462	652	190	41	1.43	33.47	Master's degree
29-1124	Radiation therapists	28	33	5	18	1.08	28.64	Associate's degree
29-1125	Recreational therapists	32	34	2	6	0.85	16.01	Bachelor's degree
29-1126	Respiratory therapists	417	470	53	13	2.51	25.92	Associate's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
29-1127	Speech-language pathologists	134	158	24	18	0.59	24.43	Master's degree
29-1129	Therapists, all other	60	68	8	13	0.60	15.29	Bachelor's degree
29-1131	Veterinarians	118	135	17	14	1.01	31.52	First professional degree
29-1199	Health diagnosing and treating practitioners, all other	81	90	9	11	0.62	24.99	Bachelor's degree
29-2011	Medical and clinical laboratory technologists	501	635	134	27	1.87	25.00	Bachelor's degree
29-2012	Medical and clinical laboratory technicians	314	390	76	24	1.28	16.07	Associate's degree
29-2021	Dental hygienists	296	392	96	32	1.05	27.01	Associate's degree
29-2031	Cardiovascular technologists and technicians	181	214	33	18	2.26	24.77	Associate's degree
29-2032	Diagnostic medical sonographers	156	190	34	22	1.93	27.32	Associate's degree
29-2033	Nuclear medicine technologists	56	63	7	13	1.47	29.64	Associate's degree
29-2034	Radiologic technologists and technicians	428	505	77	18	1.28	23.53	Associate's degree
29-2041	Emergency medical technicians and paramedics	465	699	234	50	1.41	16.78	Postsecondary vocational award
29-2051	Dietetic technicians	64	72	8	13	1.54	11.50	Moderate-term on-the-job training
29-2052	Pharmacy technicians	845	974	129	15	1.61	13.97	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
29-2053	Psychiatric technicians	23	24	1	4	0.28	10.09	Moderate-term on-the-job training
29-2054	Respiratory therapy technicians	58	56	-2	-3	2.07	17.34	Associate's degree
29-2055	Surgical technologists	114	131	17	15	0.79	15.69	Postsecondary vocational award
29-2056	Veterinary technologists and technicians	145	159	14	10	1.12	15.75	Associate's degree
29-2061	Licensed practical and licensed vocational nurses	905	985	80	9	0.77	19.36	Postsecondary vocational award
29-2071	Medical records and health information technicians	174	196	22	13	0.64	13.12	Associate's degree
29-2081	Opticians, dispensing	123	135	12	10	1.06	14.38	Long-term on-the-job training
29-2091	Orthotists and prosthetists	45	48	3	7	1.74	31.61	Bachelor's degree
29-2099	Healthcare technologists and technicians, all other	214	234	20	9	1.59	13.50	Postsecondary vocational award
29-9011	Occupational health and safety specialists	99	103	4	4	1.13	23.39	Bachelor's degree
29-9012	Occupational health and safety technicians	24	26	2	8	1.13	17.56	Postsecondary vocational award
29-9091	Athletic trainers	22	28	6	27	0.79	20.07	Bachelor's degree
29-9099	Healthcare practitioners and technical workers, all other	37	41	4	11	0.39	17.54	Postsecondary vocational award

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
31-1011	Home health aides	1,253	1,691	438	35	0.78	10.51	Short-term on-the-job training
31-1012	Nursing aides, orderlies, and attendants	1,669	1,924	255	15	0.69	11.33	Postsecondary vocational award
31-1013	Psychiatric aides	112	120	8	7	0.52	10.14	Short-term on-the-job training
31-2011	Occupational therapist assistants	45	63	18	40	1.03	22.71	Associate's degree
31-2012	Occupational therapist aides	18	24	6	33	1.14	10.69	Short-term on-the-job training
31-2021	Physical therapist assistants	82	124	42	51	0.81	23.13	Associate's degree
31-2022	Physical therapist aides	100	151	51	51	1.35	12.46	Short-term on-the-job training
31-9011	Massage therapists	153	159	6	4	0.94	15.36	Postsecondary vocational award
31-9091	Dental assistants	404	527	123	30	0.85	16.25	Moderate-term on-the-job training
31-9092	Medical assistants	1,670	2,162	492	29	2.12	13.02	Moderate-term on-the-job training
31-9093	Medical equipment preparers	109	124	15	14	1.21	11.72	Short-term on-the-job training
31-9094	Medical transcriptionists	146	164	18	12	0.95	14.67	Postsecondary vocational award

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
31-9095	Pharmacy aides	61	63	2	3	0.61	10.11	Short-term on-the-job training
31-9096	Veterinary assistants and laboratory animal caretakers	129	130	1	1	0.97	9.86	Short-term on-the-job training
31-9099	Healthcare support workers, all other	292	356	64	22	0.92	13.82	Short-term on-the-job training
33-1011	First-line supervisors/managers of correctional officers	48	56	8	17	0.69	22.46	Work experience in a related field
33-1012	First-line supervisors/managers of police and detectives	82	88	6	7	0.58	31.06	Work experience in a related field
33-1021	First-line supervisors/managers of fire fighting and prevention workers	68	76	8	12	0.77	24.20	Work experience in a related field
33-1099	First-line supervisors/managers, protective service workers, all other	90	93	3	3	0.97	20.88	Work experience in a related field
33-2011	Fire fighters	718	805	87	12	1.54	14.09	Long-term on-the-job training
33-2021	Fire inspectors and investigators	18	20	2	11	0.75	17.50	Work experience in a related field
33-3011	Bailiffs	37	43	6	16	1.13	10.36	Moderate-term on-the-job training
33-3012	Correctional officers and jailers	643	773	130	20	1.00	13.83	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
33-3021	Detectives and criminal investigators	93	103	10	11	0.55	37.57	Work experience in a related field
33-3041	Parking enforcement workers	13	15	2	15	0.70	12.72	Short-term on-the-job training
33-3051	Police and sheriff's patrol officers	1,189	1,330	141	12	1.18	18.43	Long-term on-the-job training
33-9011	Animal control workers	33	39	6	18	1.20	12.44	Moderate-term on-the-job training
33-9021	Private detectives and investigators	69	79	10	14	0.63	10.16	Work experience in a related field
33-9031	Gaming surveillance officers and gaming investigators	33	40	7	21	0.56	6.80	Moderate-term on-the-job training
33-9032	Security guards	1,631	1,579	-52	-3	0.97	10.56	Short-term on-the-job training
33-9091	Crossing guards	39	41	2	5	0.36	9.76	Short-term on-the-job training
33-9092	Lifeguards, ski patrol, and other recreational protective service workers	235	276	41	17	1.21	8.46	Short-term on-the-job training
33-9099	Protective service workers, all other	123	134	11	9	0.82	12.05	Short-term on-the-job training
35-1011	Chefs and head cooks	230	244	14	6	1.19	18.56	Work experience in a related field

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
35-1012	First-line supervisors/managers of food preparation and serving workers	1,853	1,990	137	7	1.32	14.66	Work experience in a related field
35-2011	Cooks, fast food	1,200	1,249	49	4	1.34	8.04	Short-term on-the-job training
35-2012	Cooks, institution and cafeteria	596	672	76	13	0.93	9.09	Moderate-term on-the-job training
35-2013	Cooks, private household	27	31	4	15	0.72	9.04	Long-term on-the-job training
35-2014	Cooks, restaurant	1,740	1,826	86	5	1.21	11.05	Long-term on-the-job training
35-2015	Cooks, short order	637	650	13	2	2.23	9.29	Short-term on-the-job training
35-2019	Cooks, all other	29	33	4	14	0.56	9.67	Moderate-term on-the-job training
35-2021	Food preparation workers	1,803	1,987	184	10	1.26	8.04	Short-term on-the-job training
35-3011	Bartenders	1,117	1,225	108	10	1.34	7.85	Short-term on-the-job training
35-3021	Combined food preparation and serving workers, including fast food	3,761	4,170	409	11	0.87	7.66	Short-term on-the-job training
35-3022	Counter attendants, cafeteria, food concession, and coffee shop	1,075	1,137	62	6	1.30	7.84	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
35-3031	Waiters and waitresses	4,919	5,141	222	5	1.31	7.58	Short-term on-the-job training
35-3041	Food servers, nonrestaurant	190	212	22	12	0.64	9.65	Short-term on-the-job training
35-9011	Dining room and cafeteria attendants and bartender helpers	601	635	34	6	0.91	7.40	Short-term on-the-job training
35-9021	Dishwashers	1,021	1,068	47	5	1.23	7.84	Short-term on-the-job training
35-9031	Hosts and hostesses, restaurant, lounge, and coffee shop	834	866	32	4	1.49	8.07	Short-term on-the-job training
35-9099	Food preparation and serving related workers, all other	24	26	2	8	0.28	7.11	Short-term on-the-job training
37-1011	First-line supervisors/managers of housekeeping and janitorial workers	654	788	134	20	1.05	11.51	Work experience in a related field
37-1012	First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers	304	357	53	17	1.30	17.42	Work experience in a related field
37-2011	Janitors and cleaners, except maids and housekeeping cleaners	4,163	4,647	484	12	1.16	8.27	Short-term on-the-job training
37-2012	Maids and housekeeping cleaners	2,908	3,282	374	13	0.87	8.23	Short-term on-the-job training
37-2019	Building cleaning workers, all other	666	933	267	40	0.76	6.59	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
37-2021	Pest control workers	257	295	38	15	1.74	14.24	Moderate-term on-the-job training
37-3011	Landscaping and groundskeeping workers	2,173	2,518	345	16	1.34	10.38	Short-term on-the-job training
37-3012	Pesticide handlers, sprayers, and applicators, vegetation	165	216	51	31	0.95	11.62	Moderate-term on-the-job training
37-3013	Tree trimmers and pruners	133	178	45	34	0.71	8.94	Short-term on-the-job training
37-3019	Grounds maintenance workers, all other	147	194	47	32	0.93	7.99	Short-term on-the-job training
39-1011	Gaming supervisors	32	39	7	22	0.39	9.15	Work experience in a related field
39-1012	Slot key persons	28	35	7	25	0.41	8.01	Postsecondary vocational award
39-1021	First-line supervisors/managers of personal service workers	402	417	15	4	1.07	13.95	Work experience in a related field
39-2011	Animal trainers	74	61	-13	-18	0.50	8.82	Moderate-term on-the-job training
39-2021	Nonfarm animal caretakers	589	479	-110	-19	1.02	7.73	Short-term on-the-job training
39-3011	Gaming dealers	12	13	1	8	0.08	8.43	Postsecondary vocational award

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
39-3012	Gaming and sports book writers and runners	82	88	6	7	1.65	8.23	Short-term on-the-job training
39-3021	Motion picture projectionists	59	50	-9	-15	3.10	11.11	Short-term on-the-job training
39-3031	Ushers, lobby attendants, and ticket takers	156	158	2	1	0.94	7.77	Short-term on-the-job training
39-3091	Amusement and recreation attendants	707	801	94	13	1.74	7.96	Short-term on-the-job training
39-3093	Locker room, coatroom, and dressing room attendants	16	19	3	19	0.44	8.14	Short-term on-the-job training
39-3099	Entertainment attendants and related workers, all other	28	33	5	18	0.34	8.32	Moderate-term on-the-job training
39-4021	Funeral attendants	34	35	1	3	0.64	10.27	Short-term on-the-job training
39-5011	Barbers	42	20	-22	-52	0.55	6.76	Postsecondary vocational award
39-5012	Hairdressers, hairstylists, and cosmetologists	1,042	993	-49	-5	1.19	12.53	Postsecondary vocational award
39-5092	Manicurists and pedicurists	211	239	28	13	2.01	10.58	Postsecondary vocational award
39-5093	Shampooers	17	12	-5	-29	0.29	6.67	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
39-5094	Skin care specialists	27	25	-2	-7	0.43	10.90	Postsecondary vocational award
39-6011	Baggage porters and bellhops	121	123	2	2	1.50	8.81	Short-term on-the-job training
39-6012	Concierges	38	39	1	3	1.11	13.63	Moderate-term on-the-job training
39-6021	Tour guides and escorts	322	305	-17	-5	4.69	8.54	Moderate-term on-the-job training
39-6022	Travel guides	19	24	5	26	0.46	12.02	Moderate-term on-the-job training
39-9011	Child care workers	1,904	2,257	353	19	0.63	7.88	Short-term on-the-job training
39-9021	Personal and home care aides	1,035	1,312	277	27	0.71	9.36	Short-term on-the-job training
39-9031	Fitness trainers and aerobics instructors	441	554	113	26	0.99	12.92	Postsecondary vocational award
39-9032	Recreation workers	435	492	57	13	0.78	9.64	Short-term on-the-job training
39-9041	Residential advisors	136	152	16	12	1.46	11.54	Moderate-term on-the-job training
39-9099	Personal care and service workers, all other	95	59	-36	-38	0.47	7.37	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
41-1011	First-line supervisors/managers of retail sales workers	3,379	3,421	42	1	0.97	16.12	Work experience in a related field
41-1012	First-line supervisors/managers of non-retail sales workers	1,215	1,390	175	14	0.85	19.35	Work experience in a related field
41-2011	Cashiers, except gaming	6,272	6,154	-118	-2	1.12	8.21	Short-term on-the-job training
41-2012	Gaming change persons and booth cashiers	55	61	6	11	0.55	13.71	Short-term on-the-job training
41-2021	Counter and rental clerks	770	849	79	10	1.08	11.10	Short-term on-the-job training
41-2022	Parts salespersons	257	237	-20	-8	0.75	17.07	Moderate-term on-the-job training
41-2031	Retail salespersons	7,982	8,139	157	2	1.03	10.74	Short-term on-the-job training
41-3011	Advertising sales agents	361	417	56	16	1.05	19.66	Moderate-term on-the-job training
41-3021	Insurance sales agents	1,535	1,622	87	6	1.36	15.17	Bachelor's degree
41-3031	Securities, commodities, and financial services sales agents	728	871	143	20	0.73	18.00	Bachelor's degree
41-3041	Travel agents	104	79	-25	-24	0.58	10.28	Postsecondary vocational award
41-3099	Sales representatives, services, all other	934	1,094	160	17	0.78	15.76	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
41-4011	Sales representatives, wholesale and manufacturing, technical and scientific products	485	535	50	10	0.59	27.36	Moderate-term on-the-job training
41-4012	Sales representatives, wholesale and manufacturing, except technical and scientific products	1,518	1,647	129	8	0.61	20.43	Moderate-term on-the-job training
41-9011	Demonstrators and product promoters	283	325	42	15	1.46	8.50	Moderate-term on-the-job training
41-9012	Models	38	42	4	11	0.57	6.96	Moderate-term on-the-job training
41-9021	Real estate brokers	4,412	6,244	1832	42	1.55	7.85	Work experience in a related field
41-9022	Real estate sales agents	4,484	6,325	1841	41	1.48	8.23	Postsecondary vocational award
41-9031	Sales engineers	81	85	4	5	0.65	19.73	Bachelor's degree
41-9041	Telemarketers	267	255	-12	-4	0.50	9.12	Short-term on-the-job training
41-9091	Door-to-door sales workers, news and street vendors, and related workers	887	965	78	9	0.56	6.59	Short-term on-the-job training
41-9099	Sales and related workers, all other	500	571	71	14	1.02	9.34	Moderate-term on-the-job training
43-1011	First-line supervisors/managers of office and administrative support workers	3,041	3,219	178	6	1.24	19.36	Work experience in a related field

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
43-2011	Switchboard operators, including answering service	697	652	-45	-6	2.88	10.59	Short-term on-the-job training
43-2021	Telephone operators	22	14	-8	-36	0.51	11.14	Short-term on-the-job training
43-3011	Bill and account collectors	1,783	2,035	252	14	2.73	11.49	Short-term on-the-job training
43-3021	Billing and posting clerks and machine operators	848	895	47	6	1.03	14.27	Moderate-term on-the-job training
43-3031	Bookkeeping, accounting, and auditing clerks	3,203	3,535	332	10	0.92	14.25	Moderate-term on-the-job training
43-3051	Payroll and timekeeping clerks	349	353	4	1	1.10	15.56	Moderate-term on-the-job training
43-3061	Procurement clerks	211	200	-11	-5	1.67	14.49	Short-term on-the-job training
43-3071	Tellers	957	1,085	128	13	0.97	13.17	Short-term on-the-job training
43-4011	Brokerage clerks	110	121	11	10	1.03	14.74	Moderate-term on-the-job training
43-4021	Correspondence clerks	22	23	1	5	0.77	12.52	Short-term on-the-job training
43-4031	Court, municipal, and license clerks	164	180	16	10	0.89	14.27	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
43-4041	Credit authorizers, checkers, and clerks	113	98	-15	-13	1.14	17.96	Short-term on-the-job training
43-4051	Customer service representatives	3,310	3,828	518	16	0.91	13.64	Moderate-term on-the-job training
43-4061	Eligibility interviewers, government programs	35	37	2	6	0.20	15.75	Moderate-term on-the-job training
43-4071	File clerks	509	379	-130	-26	1.51	8.38	Short-term on-the-job training
43-4081	Hotel, motel, and resort desk clerks	559	611	52	9	1.58	10.81	Short-term on-the-job training
43-4111	Interviewers, except eligibility and loan	681	752	71	10	1.69	13.53	Short-term on-the-job training
43-4121	Library assistants, clerical	121	133	12	10	0.63	8.31	Short-term on-the-job training
43-4131	Loan interviewers and clerks	210	204	-6	-3	0.61	15.92	Short-term on-the-job training
43-4141	New accounts clerks	108	99	-9	-8	0.81	15.63	Work experience in a related field
43-4151	Order clerks	164	129	-35	-21	0.44	11.21	Short-term on-the-job training
43-4161	Human resources assistants, except payroll and timekeeping	325	345	20	6	1.22	15.28	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
43-4171	Receptionists and information clerks	1,952	2,221	269	14	1.07	11.57	Short-term on-the-job training
43-4181	Reservation and transportation ticket agents and travel clerks	133	122	-11	-8	0.51	11.49	Short-term on-the-job training
43-4199	Information and record clerks, all other	413	348	-65	-16	1.23	15.66	Short-term on-the-job training
43-5011	Cargo and freight agents	213	186	-27	-13	1.57	17.94	Moderate-term on-the-job training
43-5021	Couriers and messengers	306	348	42	14	0.69	8.45	Short-term on-the-job training
43-5031	Police, fire, and ambulance dispatchers	148	172	24	16	0.96	14.35	Moderate-term on-the-job training
43-5032	Dispatchers, except police, fire, and ambulance	426	431	5	1	1.43	17.76	Moderate-term on-the-job training
43-5041	Meter readers, utilities	35	34	-1	-3	0.47	12.44	Short-term on-the-job training
43-5051	Postal service clerks	86	89	3	3	0.72	27.66	Short-term on-the-job training
43-5052	Postal service mail carriers	457	476	19	4	0.85	23.39	Short-term on-the-job training
43-5053	Postal service mail sorters, processors, and processing machine operators	148	144	-4	-3	0.53	25.72	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
43-5061	Production, planning, and expediting clerks	278	291	13	5	0.64	18.76	Short-term on-the-job training
43-5071	Shipping, receiving, and traffic clerks	1,171	1,178	7	1	1.01	12.56	Short-term on-the-job training
43-5081	Stock clerks and order fillers	2,949	2,773	-176	-6	1.01	10.00	Short-term on-the-job training
43-5111	Weighers, measurers, checkers, and samplers, recordkeeping	162	142	-20	-12	1.40	12.79	Short-term on-the-job training
43-6011	Executive secretaries and administrative assistants	1,762	1,979	217	12	0.67	16.74	Moderate-term on-the-job training
43-6012	Legal secretaries	672	755	83	12	1.19	15.27	Postsecondary vocational award
43-6013	Medical secretaries	974	1,151	177	18	1.09	15.25	Postsecondary vocational award
43-6014	Secretaries, except legal, medical, and executive	3,700	3,797	97	3	1.11	14.04	Moderate-term on-the-job training
43-9011	Computer operators	203	169	-34	-17	1.17	16.06	Moderate-term on-the-job training
43-9021	Data entry keyers	520	518	-2	0	1.08	11.37	Moderate-term on-the-job training
43-9022	Word processors and typists	145	160	15	10	0.51	13.05	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
43-9031	Desktop publishers	169	202	33	20	1.81	13.68	Postsecondary vocational award
43-9041	Insurance claims and policy processing clerks	357	326	-31	-9	0.88	14.68	Moderate-term on-the-job training
43-9051	Mail clerks and mail machine operators, except postal service	252	237	-15	-6	1.07	11.08	Short-term on-the-job training
43-9061	Office clerks, general	5,221	5,733	512	10	1.07	11.20	Short-term on-the-job training
43-9071	Office machine operators, except computer	21	22	1	5	0.17	12.28	Short-term on-the-job training
43-9081	Proofreaders and copy markers	33	38	5	15	0.94	15.03	Short-term on-the-job training
43-9111	Statistical assistants	71	76	5	7	1.98	15.71	Moderate-term on-the-job training
43-9199	Office and administrative support workers, all other	145	155	10	7	0.31	12.14	Short-term on-the-job training
45-1099	Supervisors, farming, fishing, and forestry workers	26	30	4	15	0.28	19.61	Work experience in a related field
45-2041	Graders and sorters, agricultural products	24	25	1	4	0.29	8.48	Work experience in a related field
45-2091	Agricultural equipment operators	18	21	3	17	0.16	8.05	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
45-2092	Farmworkers and laborers, crop, nursery, and greenhouse	294	348	54	18	0.26	8.40	Short-term on-the-job training
45-2093	Farmworkers, farm and ranch animals	35	42	7	20	0.24	10.35	Short-term on-the-job training
45-3011	Fishers and related fishing workers	195	181	-14	-7	1.40	6.61	Moderate-term on-the-job training
45-4022	Logging equipment operators	14	15	1	7	0.23	23.66	Moderate-term on-the-job training
47-1011	First-line supervisors/managers of construction trades and extraction workers	1,797	2,028	231	13	1.14	21.86	Work experience in a related field
47-2011	Boilermakers	14	15	1	7	0.45	22.29	Long-term on-the-job training
47-2021	Brickmasons and blockmasons	171	179	8	5	0.82	16.52	Long-term on-the-job training
47-2022	Stonemasons	46	53	7	15	0.58	14.58	Long-term on-the-job training
47-2031	Carpenters	2,358	2,689	331	14	0.99	15.80	Long-term on-the-job training
47-2041	Carpet installers	49	56	7	14	0.54	13.71	Moderate-term on-the-job training
47-2042	Floor layers, except carpet, wood, and hard tiles	36	41	5	14	0.58	13.76	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
47-2043	Floor sanders and finishers	66	75	9	14	1.23	13.56	Moderate-term on-the-job training
47-2044	Tile and marble setters	117	142	25	21	1.00	16.15	Long-term on-the-job training
47-2051	Cement masons and concrete finishers	254	285	31	12	0.81	14.42	Moderate-term on-the-job training
47-2053	Terrazzo workers and finishers	25	30	5	20	1.17	14.84	Long-term on-the-job training
47-2061	Construction laborers	2,226	2,530	304	14	1.04	12.78	Moderate-term on-the-job training
47-2071	Paving, surfacing, and tamping equipment operators	84	103	19	23	0.88	15.27	Moderate-term on-the-job training
47-2072	Pile-driver operators	51	60	9	18	1.07	14.50	Moderate-term on-the-job training
47-2073	Operating engineers and other construction equipment operators	414	472	58	14	0.63	15.68	Moderate-term on-the-job training
47-2081	Drywall and ceiling tile installers	75	80	5	7	0.32	15.90	Moderate-term on-the-job training
47-2082	Tapers	42	48	6	14	0.43	14.37	Moderate-term on-the-job training
47-2111	Electricians	1,244	1,221	-23	-2	1.13	17.74	Long-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
47-2121	Glaziers	66	76	10	15	0.76	13.25	Long-term on-the-job training
47-2131	Insulation workers, floor, ceiling, and wall	30	31	1	3	0.65	15.59	Moderate-term on-the-job training
47-2132	Insulation workers, mechanical	37	44	7	19	0.75	16.85	Moderate-term on-the-job training
47-2141	Painters, construction and maintenance	985	1,147	162	16	1.22	14.63	Moderate-term on-the-job training
47-2142	Paperhangers	17	19	2	12	0.66	14.33	Moderate-term on-the-job training
47-2151	Pipelayers	208	221	13	6	1.27	14.34	Moderate-term on-the-job training
47-2152	Plumbers, pipefitters, and steamfitters	729	821	92	13	1.00	17.15	Long-term on-the-job training
47-2161	Plasterers and stucco masons	18	20	2	11	0.23	15.58	Long-term on-the-job training
47-2171	Reinforcing iron and rebar workers	22	24	2	9	0.48	16.70	Long-term on-the-job training
47-2181	Roofers	175	204	29	17	0.66	13.61	Moderate-term on-the-job training
47-2211	Sheet metal workers	270	297	27	10	1.06	15.97	Long-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
47-2221	Structural iron and steel workers	36	39	3	8	0.33	16.82	Long-term on-the-job training
47-3011	Helpers, brickmasons, blockmasons, stonemasons, and tile and marble setters	98	98	0	0	1.21	11.60	Short-term on-the-job training
47-3012	Helpers, carpenters	225	258	33	15	1.85	12.57	Short-term on-the-job training
47-3013	Helpers, electricians	434	405	-29	-7	2.82	12.06	Short-term on-the-job training
47-3014	Helpers, painters, paperhangers, plasterers, and stucco masons	26	28	2	8	0.80	10.73	Short-term on-the-job training
47-3015	Helpers, pipelayers, plumbers, pipefitters, and steamfitters	304	347	43	14	2.51	13.20	Short-term on-the-job training
47-3016	Helpers, roofers	42	47	5	12	1.37	10.04	Short-term on-the-job training
47-3019	Helpers, construction trades, all other	30	34	4	13	0.71	10.41	Short-term on-the-job training
47-4011	Construction and building inspectors	172	204	32	19	0.87	19.59	Work experience in a related field
47-4021	Elevator installers and repairers	16	23	7	44	0.42	20.55	Long-term on-the-job training
47-4031	Fence erectors	28	34	6	21	0.51	12.24	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
47-4041	Hazardous materials removal workers	64	47	-17	-27	0.93	18.44	Moderate-term on-the-job training
47-4051	Highway maintenance workers	35	39	4	11	0.16	12.85	Moderate-term on-the-job training
47-4061	Rail-track laying and maintenance equipment operators	15	16	1	7	0.62	20.80	Moderate-term on-the-job training
47-4071	Septic tank servicers and sewer pipe cleaners	41	35	-6	-15	0.90	14.09	Moderate-term on-the-job training
47-4091	Segmental pavers	14	16	2	14	1.35	14.68	Moderate-term on-the-job training
47-4099	Construction and related workers, all other	16	18	2	13	0.19	13.93	Moderate-term on-the-job training
47-5021	Earth drillers, except oil and gas	14	15	1	7	0.34	15.55	Moderate-term on-the-job training
47-5071	Roustabouts, oil and gas	10	13	3	30	0.10	11.59	Moderate-term on-the-job training
49-1011	First-line supervisors/managers of mechanics, installers, and repairers	904	946	42	5	1.29	24.87	Work experience in a related field
49-2011	Computer, automated teller, and office machine repairers	246	268	22	9	0.95	16.66	Postsecondary vocational award
49-2022	Telecommunications equipment installers and repairers, except line installers	260	262	2	1	0.80	20.36	Long-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
49-2091	Avionics technicians	12	13	1	8	0.43	23.18	Postsecondary vocational award
49-2092	Electric motor, power tool, and related repairers	28	27	-1	-4	0.68	14.35	Postsecondary vocational award
49-2094	Electrical and electronics repairers, commercial and industrial equipment	144	144	0	0	1.22	20.51	Postsecondary vocational award
49-2095	Electrical and electronics repairers, powerhouse, substation, and relay	39	39	0	0	1.03	18.60	Postsecondary vocational award
49-2096	Electronic equipment installers and repairers, motor vehicles	26	21	-5	-19	0.77	13.85	Postsecondary vocational award
49-2097	Electronic home entertainment equipment installers and repairers	82	76	-6	-7	0.92	15.95	Postsecondary vocational award
49-2098	Security and fire alarm systems installers	57	59	2	4	0.51	13.18	Postsecondary vocational award
49-3011	Aircraft mechanics and service technicians	153	156	3	2	0.82	22.88	Postsecondary vocational award
49-3021	Automotive body and related repairers	245	273	28	11	0.87	16.67	Long-term on-the-job training
49-3022	Automotive glass installers and repairers	32	36	4	13	0.88	11.12	Long-term on-the-job training
49-3023	Automotive service technicians and mechanics	1,079	1,181	102	9	0.84	15.47	Postsecondary vocational award

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
49-3031	Bus and truck mechanics and diesel engine specialists	457	504	47	10	1.05	16.04	Postsecondary vocational award
49-3041	Farm equipment mechanics	11	13	2	18	0.20	13.41	Postsecondary vocational award
49-3042	Mobile heavy equipment mechanics, except engines	317	337	20	6	1.54	20.79	Postsecondary vocational award
49-3043	Rail car repairers	12	13	1	8	0.29	14.87	Long-term on-the-job training
49-3051	Motorboat mechanics	36	41	5	14	0.66	10.50	Long-term on-the-job training
49-3052	Motorcycle mechanics	43	47	4	9	0.86	10.64	Long-term on-the-job training
49-3053	Outdoor power equipment and other small engine mechanics	68	74	6	9	1.11	11.95	Moderate-term on-the-job training
49-3092	Recreational vehicle service technicians	22	22	0	0	0.89	17.15	Long-term on-the-job training
49-3093	Tire repairers and changers	159	164	5	3	1.06	10.94	Short-term on-the-job training
49-9011	Mechanical door repairers	10	13	3	30	0.37	14.22	Moderate-term on-the-job training
49-9012	Control and valve installers and repairers, except mechanical door	62	63	1	2	0.89	23.80	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
49-9021	Heating, air conditioning, and refrigeration mechanics and installers	663	752	89	13	1.33	18.20	Long-term on-the-job training
49-9031	Home appliance repairers	111	117	6	5	0.87	10.01	Long-term on-the-job training
49-9041	Industrial machinery mechanics	507	506	-1	0	1.15	20.72	Long-term on-the-job training
49-9042	Maintenance and repair workers, general	2,886	3,110	224	8	1.33	14.25	Moderate-term on-the-job training
49-9043	Maintenance workers, machinery	22	22	0	0	0.19	17.64	Short-term on-the-job training
49-9044	Millwrights	51	50	-1	-2	0.75	25.35	Long-term on-the-job training
49-9051	Electrical power-line installers and repairers	171	180	9	5	0.95	20.33	Long-term on-the-job training
49-9052	Telecommunications line installers and repairers	164	181	17	10	0.58	16.84	Long-term on-the-job training
49-9061	Camera and photographic equipment repairers	15	19	4	27	0.67	8.74	Moderate-term on-the-job training
49-9062	Medical equipment repairers	158	211	53	34	2.30	15.15	Associate's degree
49-9063	Musical instrument repairers and tuners	17	20	3	18	0.67	8.19	Long-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
49-9064	Watch repairers	14	16	2	14	0.64	7.81	Long-term on-the-job training
49-9069	Precision instrument and equipment repairers, all other	19	22	3	16	0.51	10.57	Moderate-term on-the-job training
49-9091	Coin, vending, and amusement machine servicers and repairers	52	40	-12	-23	0.54	12.77	Moderate-term on-the-job training
49-9092	Commercial divers	36	48	12	33	0.71	7.09	Moderate-term on-the-job training
49-9093	Fabric menders, except garment	38	50	12	32	0.79	6.93	Moderate-term on-the-job training
49-9094	Locksmiths and safe repairers	146	158	12	8	2.19	11.91	Moderate-term on-the-job training
49-9096	Riggers	34	32	-2	-6	1.54	14.15	Short-term on-the-job training
49-9097	Signal and track switch repairers	37	49	12	32	0.67	7.46	Moderate-term on-the-job training
49-9098	Helpers--Installation, maintenance, and repair workers	301	327	26	9	1.31	10.34	Short-term on-the-job training
49-9099	Installation, maintenance, and repair workers, all other	144	160	16	11	0.57	14.37	Moderate-term on-the-job training
51-1011	First-line supervisors/managers of production and operating workers	747	739	-8	-1	0.72	23.49	Work experience in a related field

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-2011	Aircraft structure, surfaces, rigging, and systems assemblers	50	56	6	12	0.85	20.40	Long-term on-the-job training
51-2022	Electrical and electronic equipment assemblers	46	42	-4	-9	0.15	13.44	Short-term on-the-job training
51-2023	Electromechanical equipment assemblers	12	12	0	0	0.12	15.99	Short-term on-the-job training
51-2031	Engine and other machine assemblers	39	45	6	15	0.69	14.08	Short-term on-the-job training
51-2041	Structural metal fabricators and fitters	267	276	9	3	1.60	18.42	Moderate-term on-the-job training
51-2091	Fiberglass laminators and fabricators	88	85	-3	-3	1.53	13.26	Moderate-term on-the-job training
51-2092	Team assemblers	1,714	1,782	68	4	1.05	12.33	Moderate-term on-the-job training
51-2099	Assemblers and fabricators, all other	70	69	-1	-1	0.16	10.80	Moderate-term on-the-job training
51-3011	Bakers	211	224	13	6	0.90	9.89	Long-term on-the-job training
51-3021	Butchers and meat cutters	158	160	2	1	0.78	13.99	Long-term on-the-job training
51-3022	Meat, poultry, and fish cutters and trimmers	239	252	13	5	0.95	13.30	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-3023	Slaughterers and meat packers	145	145	0	0	0.93	9.01	Moderate-term on-the-job training
51-3091	Food and tobacco roasting, baking, and drying machine operators and tenders	17	19	2	12	0.52	12.38	Short-term on-the-job training
51-3092	Food batchmakers	91	89	-2	-2	0.57	13.09	Short-term on-the-job training
51-3093	Food cooking machine operators and tenders	28	27	-1	-4	0.44	12.91	Short-term on-the-job training
51-4011	Computer-controlled machine tool operators, metal and plastic	242	260	18	7	1.17	16.51	Moderate-term on-the-job training
51-4012	Numerical tool and process control programmers	12	14	2	17	0.46	19.07	Long-term on-the-job training
51-4022	Forging machine setters, operators, and tenders, metal and plastic	21	16	-5	-24	0.51	13.29	Moderate-term on-the-job training
51-4031	Cutting, punching, and press machine setters, operators, and tenders, metal and plastic	136	126	-10	-7	0.40	11.41	Moderate-term on-the-job training
51-4032	Drilling and boring machine tool setters, operators, and tenders, metal and plastic	33	32	-1	-3	0.67	14.70	Moderate-term on-the-job training
51-4033	Grinding, lapping, polishing, and buffing machine tool setters, operators, and tenders, metal and plastic	26	26	0	0	0.19	18.51	Moderate-term on-the-job training
51-4034	Lathe and turning machine tool setters, operators, and tenders, metal and plastic	26	26	0	0	0.32	16.18	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-4035	Milling and planing machine setters, operators, and tenders, metal and plastic	51	49	-2	-4	1.25	12.94	Moderate-term on-the-job training
51-4041	Machinists	399	415	16	4	0.65	15.21	Long-term on-the-job training
51-4072	Molding, coremaking, and casting machine setters, operators, and tenders, metal and plastic	77	64	-13	-17	0.37	13.09	Moderate-term on-the-job training
51-4081	Multiple machine tool setters, operators, and tenders, metal and plastic	23	24	1	4	0.17	13.05	Moderate-term on-the-job training
51-4111	Tool and die makers	44	44	0	0	0.36	14.87	Long-term on-the-job training
51-4121	Welders, cutters, solderers, and brazers	516	542	26	5	0.83	15.75	Long-term on-the-job training
51-4122	Welding, soldering, and brazing machine setters, operators, and tenders	60	68	8	13	0.53	12.71	Moderate-term on-the-job training
51-4191	Heat treating equipment setters, operators, and tenders, metal and plastic	23	23	0	0	0.63	15.14	Moderate-term on-the-job training
51-4194	Tool grinders, filers, and sharpeners	11	11	0	0	0.37	13.78	Moderate-term on-the-job training
51-5011	Bindery workers	45	42	-3	-7	0.49	12.44	Short-term on-the-job training
51-5021	Job printers	41	43	2	5	0.57	18.25	Long-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-5022	Prepress technicians and workers	31	30	-1	-3	0.33	14.64	Postsecondary vocational award
51-5023	Printing machine operators	140	142	2	1	0.46	13.51	Moderate-term on-the-job training
51-6011	Laundry and dry-cleaning workers	371	420	49	13	0.88	8.93	Moderate-term on-the-job training
51-6021	Pressers, textile, garment, and related materials	149	153	4	3	1.41	9.43	Short-term on-the-job training
51-6031	Sewing machine operators	135	142	7	5	0.43	11.25	Moderate-term on-the-job training
51-6041	Shoe and leather workers and repairers	30	36	6	20	0.62	7.44	Long-term on-the-job training
51-6051	Sewers, hand	88	113	25	28	0.80	6.83	Short-term on-the-job training
51-6052	Tailors, dressmakers, and custom sewers	91	117	26	29	0.62	7.29	Long-term on-the-job training
51-6091	Extruding and forming machine setters, operators, and tenders, synthetic and glass fibers	20	15	-5	-25	0.82	15.98	Moderate-term on-the-job training
51-6093	Upholsterers	80	99	19	24	0.57	7.72	Long-term on-the-job training
51-6099	Textile, apparel, and furnishings workers, all other	24	20	-4	-17	0.85	14.94	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-7011	Cabinetmakers and bench carpenters	66	60	-6	-9	0.33	14.85	Long-term on-the-job training
51-7021	Furniture finishers	43	49	6	14	0.65	8.59	Long-term on-the-job training
51-7041	Sawing machine setters, operators, and tenders, wood	22	21	-1	-5	0.26	10.62	Moderate-term on-the-job training
51-7042	Woodworking machine setters, operators, and tenders, except sawing	28	23	-5	-18	0.22	10.34	Moderate-term on-the-job training
51-8011	Nuclear power reactor operators	30	34	4	13	2.33	23.94	Long-term on-the-job training
51-8013	Power plant operators	137	141	4	3	2.28	17.62	Long-term on-the-job training
51-8021	Stationary engineers and boiler operators	56	54	-2	-4	0.86	18.93	Long-term on-the-job training
51-8031	Water and liquid waste treatment plant and system operators	178	204	26	15	1.01	17.36	Long-term on-the-job training
51-8091	Chemical plant and system operators	92	71	-21	-23	1.30	20.21	Long-term on-the-job training
51-8092	Gas plant operators	22	21	-1	-5	0.82	16.99	Long-term on-the-job training
51-8093	Petroleum pump system operators, refinery operators, and gaugers	43	41	-2	-5	0.58	26.63	Long-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-8099	Plant and system operators, all other	15	15	0	0	0.67	19.25	Long-term on-the-job training
51-9011	Chemical equipment operators and tenders	53	50	-3	-6	0.64	16.42	Moderate-term on-the-job training
51-9012	Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders	75	62	-13	-17	1.11	14.12	Moderate-term on-the-job training
51-9021	Crushing, grinding, and polishing machine setters, operators, and tenders	29	24	-5	-17	0.46	14.26	Moderate-term on-the-job training
51-9022	Grinding and polishing workers, hand	29	27	-2	-7	0.48	14.45	Moderate-term on-the-job training
51-9023	Mixing and blending machine setters, operators, and tenders	78	75	-3	-4	0.37	15.17	Moderate-term on-the-job training
51-9032	Cutting and slicing machine setters, operators, and tenders	56	40	-16	-29	0.50	19.51	Moderate-term on-the-job training
51-9041	Extruding, forming, pressing, and compacting machine setters, operators, and tenders	146	129	-17	-12	1.20	15.95	Moderate-term on-the-job training
51-9051	Furnace, kiln, oven, drier, and kettle operators and tenders	28	18	-10	-36	0.79	28.96	Moderate-term on-the-job training
51-9061	Inspectors, testers, sorters, samplers, and weighers	638	629	-9	-1	0.90	14.58	Moderate-term on-the-job training
51-9071	Jewelers and precious stone and metal workers	47	61	14	30	0.56	14.72	Postsecondary vocational award

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-9081	Dental laboratory technicians	33	25	-8	-24	0.45	12.30	Long-term on-the-job training
51-9083	Ophthalmic laboratory technicians	22	29	7	32	0.39	18.08	Moderate-term on-the-job training
51-9111	Packaging and filling machine operators and tenders	301	296	-5	-2	0.57	12.11	Short-term on-the-job training
51-9121	Coating, painting, and spraying machine setters, operators, and tenders	74	63	-11	-15	0.48	14.43	Moderate-term on-the-job training
51-9122	Painters, transportation equipment	93	96	3	3	1.11	18.60	Long-term on-the-job training
51-9123	Painting, coating, and decorating workers	66	65	-1	-2	1.15	11.21	Short-term on-the-job training
51-9131	Photographic process workers	28	21	-7	-25	0.60	13.69	Moderate-term on-the-job training
51-9132	Photographic processing machine operators	95	61	-34	-36	1.09	9.29	Short-term on-the-job training
51-9141	Semiconductor processors	31	35	4	13	0.51	13.04	Associate's degree
51-9191	Cementing and gluing machine operators and tenders	22	17	-5	-23	0.70	15.70	Moderate-term on-the-job training
51-9192	Cleaning, washing, and metal pickling equipment operators and tenders	30	25	-5	-17	0.88	14.47	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-9193	Cooling and freezing equipment operators and tenders	17	12	-5	-29	0.61	14.94	Moderate-term on-the-job training
51-9194	Etchers and engravers	11	11	0	0	0.46	16.56	Long-term on-the-job training
51-9195	Molders, shapers, and casters, except metal and plastic	45	45	0	0	0.62	11.19	Moderate-term on-the-job training
51-9196	Paper goods machine setters, operators, and tenders	200	103	-97	-49	1.28	19.37	Moderate-term on-the-job training
51-9197	Tire builders	32	31	-1	-3	0.98	13.47	Moderate-term on-the-job training
51-9198	Helpers--Production workers	626	608	-18	-3	0.88	8.74	Short-term on-the-job training
51-9199	Production workers, all other	214	212	-2	-1	0.54	11.53	Moderate-term on-the-job training
53-1021	First-line supervisors/managers of helpers, laborers, and material movers, hand	282	303	21	7	0.96	18.52	Work experience in a related field
53-1031	First-line supervisors/managers of transportation and material-moving machine and vehicle operators	398	420	22	6	1.16	23.71	Work experience in a related field
53-2011	Airline pilots, copilots, and flight engineers	20	20	0	0	0.16	34.39	Bachelor's degree
53-2012	Commercial pilots	179	191	12	7	2.95	37.63	Postsecondary vocational award

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
53-2021	Air traffic controllers	29	28	-1	-3	0.58	38.20	Long-term on-the-job training
53-2022	Airfield operations specialists	18	17	-1	-6	0.72	20.26	Long-term on-the-job training
53-3011	Ambulance drivers and attendants, except emergency medical technicians	37	52	15	41	1.07	9.45	Moderate-term on-the-job training
53-3021	Bus drivers, transit and intercity	90	104	14	16	0.28	7.75	Moderate-term on-the-job training
53-3022	Bus drivers, school	809	1,056	247	31	1.07	9.40	Short-term on-the-job training
53-3031	Driver/sales workers	583	565	-18	-3	0.63	13.03	Short-term on-the-job training
53-3032	Truck drivers, heavy and tractor-trailer	2,375	2,664	289	12	0.82	16.56	Moderate-term on-the-job training
53-3033	Truck drivers, light or delivery services	1,831	1,932	101	6	1.04	11.46	Short-term on-the-job training
53-3041	Taxi drivers and chauffeurs	437	501	64	15	0.85	8.94	Short-term on-the-job training
53-3099	Motor vehicle operators, all other	25	25	0	0	0.20	17.40	Short-term on-the-job training
53-4019	Locomotive engineers and operators	43	42	-1	-2	0.58	18.99	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
53-4021	Railroad brake, signal, and switch operators	12	11	-1	-8	0.37	16.32	Moderate-term on-the-job training
53-4031	Railroad conductors and yardmasters	35	34	-1	-3	0.73	20.45	Moderate-term on-the-job training
53-5011	Sailors and marine oilers	29	24	-5	-17	0.56	16.20	Short-term on-the-job training
53-5021	Captains, mates, and pilots of water vessels	178	152	-26	-15	3.19	16.69	Work experience in a related field
53-5022	Motorboat operators	294	298	4	1	18.99	17.46	Moderate-term on-the-job training
53-5031	Ship engineers	42	35	-7	-17	2.07	25.71	Postsecondary vocational award
53-6021	Parking lot attendants	91	93	2	2	0.42	7.48	Short-term on-the-job training
53-6031	Service station attendants	57	68	11	19	0.44	9.20	Short-term on-the-job training
53-6051	Transportation inspectors	25	26	1	4	0.66	28.69	Work experience in a related field
53-6099	Transportation workers, all other	52	50	-2	-4	0.78	12.81	Short-term on-the-job training
53-7011	Conveyor operators and tenders	34	32	-2	-6	0.56	14.03	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
53-7021	Crane and tower operators	235	211	-24	-10	3.44	16.95	Long-term on-the-job training
53-7032	Excavating and loading machine and dragline operators	104	120	16	15	0.95	14.20	Moderate-term on-the-job training
53-7033	Loading machine operators, underground mining	10	13	3	30	0.50	13.80	Moderate-term on-the-job training
53-7051	Industrial truck and tractor operators	851	860	9	1	0.91	13.73	Short-term on-the-job training
53-7061	Cleaners of vehicles and equipment	583	653	70	12	1.07	8.09	Short-term on-the-job training
53-7062	Laborers and freight, stock, and material movers, hand	4,076	4,027	-49	-1	1.14	9.56	Short-term on-the-job training
53-7063	Machine feeders and offbearers	84	68	-16	-19	0.43	12.19	Short-term on-the-job training
53-7064	Packers and packagers, hand	1,059	991	-68	-6	0.91	8.09	Short-term on-the-job training
53-7072	Pump operators, except wellhead pumpers	10	10	0	0	0.22	12.81	Moderate-term on-the-job training
53-7081	Refuse and recyclable material collectors	427	493	66	15	1.79	12.52	Short-term on-the-job training
53-7121	Tank car, truck, and ship loaders	27	22	-5	-19	1.26	15.35	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
53-7199	Material moving workers, all other	313	314	1	0	5.25	21.43	Moderate-term on-the-job training
		275,419	302,619	27,200	10%		\$16.34	

at least 1.25

greater than \$16.34

Source: EMSI

Appendix B: Businesses by 3-Digit NAICS Codes

Charleston County								
Change								
Industry	NAICS Code	2003	2008	Average Size	#	%	SC % change	US % change
Crop Production	111	16	13	8	-3	-18.8	-11.3	-6.8
Support Activities for Agriculture and Forestry	115	8	9	18	1	12.5	-3.1	2.8
Utilities	221	11	8	76	-3	-27.3	4.0	0.5
Construction of Buildings	236	457	575	6	118	25.8	6.4	12.3
Heavy and Civil Engineering Construction	237	93	127	15	34	36.6	4.2	-0.5
Specialty Trade Contractors	238	793	762	9	-31	-3.9	-3.0	11.1
Food Manufacturing	311	19	22	16	3	15.8	-6.0	-2.1
Textile Mills	313	11	8	3	-3	-27.3	-27.8	-24.2
Textile Product Mills	314	12	18	4	6	50.0	2.6	-1.5
Apparel Manufacturing	315	7	5	7	-2	-28.6	-30.9	-32.4
Wood Product Manufacturing	321	10	7	8	-3	-30.0	2.2	-5.3
Paper Manufacturing	322	10	12	92	2	20.0	15.1	-5.7
Printing and Related Support Activities	323	48	43	7	-5	-10.4	-9.1	-11.7
Chemical Manufacturing	325	23	28	37	5	21.7	14.8	5.1
Plastics and Rubber Products Manufacturing	326	10	6	14	-4	-40.0	6.8	-7.9
Nonmetallic Mineral Product Manufacturing	327	25	27	15	2	8.0	14.1	4.1
Primary Metal Manufacturing	331	4	8	4	4	100.0	18.1	-3.1
Fabricated Metal Product Manufacturing	332	38	45	15	7	18.4	0.6	-0.9
Machinery Manufacturing	333	15	17	76	2	13.3	-6.8	-8.0
Computer and Electronic Product Manufacturing	334	13	7	9	-6	-46.2	33.1	-7.1
Transportation Equipment Manufacturing	336	32	36	124	4	12.5	12.5	0.6
Furniture and Related Product Manufacturing	337	38	32	12	-6	-15.8	-5.5	-6.0
Miscellaneous Manufacturing	339	32	37	25	5	15.6	18.4	-0.4
Merchant Wholesalers, Durable Goods	423	263	287	12	24	9.1	-5.9	-3.6
Merchant Wholesalers, Nondurable Goods	424	125	135	10	10	8.0	-11.3	-3.4
Wholesale Electronic Markets and Agents and Brokers	425	114	132	5	18	15.8	80.4	30.9
Motor Vehicle and Parts Dealers	441	200	178	21	-22	-11.0	-7.7	1.6
Furniture and Home Furnishings Stores	442	115	118	9	3	2.6	-8.7	0.1
Electronics and Appliance Stores	443	101	75	12	-26	-25.7	-15.0	-1.0
Building Material and Garden Equipment and Supplies Dealers	444	131	132	16	1	0.8	-5.4	1.2
Food and Beverage Stores	445	190	173	31	-17	-8.9	-9.7	-0.1

Charleston County								
Industry	NAICS Code	2003	2008	Average Size	Change		SC % change	US % change
					#	%		
Health and Personal Care Stores	446	139	150	9	11	7.9	16.3	19.9
Gasoline Stations	447	137	136	7	-1	-0.7	-0.3	-2.2
Clothing and Clothing Accessories Stores	448	281	306	9	25	8.9	-1.9	5.8
Sporting Goods, Hobby, Book, and Music Stores	451	114	112	10	-2	-1.8	-7.0	-6.7
General Merchandise Stores	452	78	87	67	9	11.5	18.1	13.0
Miscellaneous Store Retailers	453	327	287	6	-40	-12.2	-19.8	-9.2
Nonstore Retailers	454	42	44	7	2	4.8	-16.2	13.9
Air Transportation	481	18	10	14	-8	-44.4	7.6	8.5
Truck Transportation	484	168	170	12	2	1.2	-1.6	5.2
Transit and Ground Passenger Transportation	485	22	25	38	3	13.6	2.1	4.3
Scenic and Sightseeing Transportation	487	28	22	15	-6	-21.4	-16.3	0.7
Support Activities for Transportation	488	147	137	26	-10	-6.8	3.4	9.9
Couriers and Messengers	492	11	13	35	2	18.2	20.4	10.2
Warehousing and Storage	493	39	34	18	-5	-12.8	3.1	18.7
Publishing Industries (except Internet)	511	38	45	24	7	18.4	14.9	1.8
Motion Picture and Sound Recording Industries	512	23	24	11	1	4.3	11.4	1.4
Broadcasting (except Internet)	515	20	15	44	-5	-25.0	-7.3	0.0
Telecommunications	517	41	70	19	29	70.7	41.8	9.6
Credit Intermediation and Related Activities	522	313	365	10	52	16.6	6.5	16.6
Insurance Carriers and Related Activities	524	235	227	8	-8	-3.4	4.3	5.0
Real Estate	531	448	612	4	164	36.6	22.1	18.2
Professional, Scientific, and Technical Services	541	1418	1596	7	178	12.6	15.7	15.6
Management of Companies and Enterprises	551	27	39	23	12	44.4	67.7	31.5
Administrative and Support Services	561	658	710	25	52	7.9	10.6	13.9
Waste Management and Remediation Services	562	30	27	16	-3	-10.0	12.3	15.6
Educational Services	611	111	129	19	18	16.2	26.4	23.3
Ambulatory Health Care Services	621	766	846	12	80	10.4	10.2	12.4
Hospitals	622	8	9	696	1	12.5	53.4	7.3
Nursing and Residential Care Facilities	623	68	54	52	-14	-20.6	0.0	9.4
Social Assistance	624	158	164	16	6	3.8	1.0	34.3
Performing Arts, Spectator Sports, and Related Industries	711	45	45	10	0	0.0	14.1	16.2
Museums, Historical Sites, and Similar Institutions	712	16	18	25	2	12.5	40.0	13.1
Amusement, Gambling, and	713	106	112	20	6	5.7	-5.5	9.7

Charleston County								
Change								
Industry	NAICS Code	2003	2008	Average Size	#	%	SC % change	US % change
Recreation Industries								
Accommodation	721	141	138	45	-3	-2.1	0.1	4.9
Food Services and Drinking Places	722	871	911	22	40	4.6	3.4	11.5
Repair and Maintenance	811	337	307	6	-30	-8.9	-13.2	-0.9
Personal and Laundry Services	812	297	319	7	22	7.4	2.2	7.2
Religious, Grantmaking, Civic, Professional, and Similar Organizations								
Organizations	813	123	140	8	17	13.8	18.3	4.1
Private Households	814	576	522	1	-54	-9.4	21.2	22.1
	growth rate exceeds both SC and US growth rates							

Source: Bureau of Labor Statistics

Appendix C: Charleston County Employment by Industry Sector

Industry	NAICS code	Employment		2003-2008 Change		Location Quotient	Competitive Effect	2008 Average Annual Wage (\$)	Projected Growth
		2003	2008	#	%				
Total		187,067	212,456	25,389	13.6			38,376	5%

Industry	NAICS code	Employment		2003-2008 Change		Location Quotient	Competitive Effect	2008 Average Annual Wage (\$)	Projected Growth
		2003	2008	#	%				
NONE									

Industry	NAICS code	Employment		2003-2008 Change		Location Quotient	Competitive Effect	2008 Average Annual Wage (\$)	Projected Growth
		2003	2008	#	%				
Construction of Buildings	236	2,780	3,287	507	18	1.41	372	54,184	BA
Machinery Manufacturing	333	674	1,284	610	91	0.65	590	53,664	AA
Electrical Equipment, Appliance, and Component Manufacturing	335	22	160	138	627	--	140	48,568	AA
Transportation Equipment Manufacturing	336	1,598	4,471	2,873	180	1.48	3,006	58,084	D
Merchant Wholesalers, Durable Goods	423	2,440	3,386	946	39	0.74	833	54,652	A
Merchant Wholesalers, Nondurable Goods	424	1,182	1,416	234	20	0.40	209	46,280	A
Transit and Ground Passenger Transportation	485	656	966	310	47	1.59	240	24,804	AA
Publishing Industries (except Internet)	511	833	1,068	235	28	0.74	282	54,080	A
Real Estate	531	2,251	2,667	416	18	1.23	272	40,456	A
Management of Companies and Enterprises	551	710	888	178	25	0.29	77	69,316	A
Ambulatory Health Care Services	621	7,570	9,774	2,204	29	1.14	850	57,824	A

4 star sectors		Employment		2003-2008 Change		Location Quotient	Competitive Effect	2008 Average Annual Wage (\$)	Projected Growth
Industry	NAICS code	2003	2008	#	%				
Chemical Manufacturing	325	793	1,037	244	31	0.95	295	59,280	D
Miscellaneous Manufacturing	339	624	911	287	46	1.08	321	44,928	D
Furniture and Home Furnishings Stores	442	914	1055	141	15	1.39	176	25,844	BA
Telecommunications	517	1101	1306	205	19	0.83	266	53,924	BA
Data Processing, Hosting and Related Services	518	106	787	681	642	0.62	718	36,868	AA
Administrative and Support Services	561	13,566	17,699	4,133	30	1.48	3,387	26,520	BA
Amusement, Gambling, and Recreation Industries	713	1,713	2,208	495	29	1.05	341	18,564	A
Religious, Grantmaking, Civic, Professional, and Similar Organizations	813	856	1,162	306	36	0.54	260	29,016	A

3 star or fewer sectors		Employment		2003-2008 Change		Location Quotient	Competitive Effect	2008 Average Annual Wage (\$)	Projected Growth
Industry	NAICS code	2003	2008	#	%				
Apparel Manufacturing	315	40	33	-7	-18	0.10	7	47,580	A
Motor Vehicle and Parts Dealers	441	3,608	3,691	83	2	1.31	182	39,052	BA
Food and Beverage Stores	445	4,909	5,408	499	10	1.26	457	25,428	BA
Clothing and Clothing Accessories Stores	448	2,213	2,805	592	27	1.19	318	18,616	BA
Sporting Goods, Hobby, Book, and Music Stores	451	822	1,074	252	31	1.11	264	18,356	BA
General Merchandise Stores	452	4,723	5,845	1,122	24	1.24	738	21,424	BA
Credit Intermediation and Related Activities	522	3,131	3,477	346	11	0.81	416	52,884	BA
Insurance Carriers and Related Activities	524	1,702	1,926	224	13	0.56	208	53,092	BA
Educational Services	611	2,164	2,495	331	15	0.70	-46	33,176	AA
Accommodation	721	5,821	6,230	409	7	2.22	108	23,244	BA
Food Services and Drinking Places	722	18,132	20,426	2,294	13	1.43	223	14,924	BA
Personal and Laundry Services	812	2,073	2,384	311	15	1.16	212	24,232	D
Utilities	221	1,178	610	-568	-48	0.73	-531	58,032	A
Heavy and Civil Engineering Construction	237	2,275	1,940	-335	-15	1.44	-513	47,320	BA

3 star or fewer sectors		Employment		2003-2008 Change					
Industry	NAICS code	2003	2008	#	%	Location Quotient	Competitive Effect	2008 Average Annual Wage (\$)	Projected Growth
Textile Product Mills	314	51	67	16	31	0.32	26	29,172	D
Nonmetallic Mineral Product Manufacturing	327	376	402	26	7	0.61	50	45,344	D
Support Activities for Transportation	488	3,523	3,612	89	3	4.00	-425	40,092	BA
Couriers and Messengers	492	416	455	39	9	0.54	32	36,348	A
Broadcasting (except Internet)	515	883	662	-221	-25	1.40	-200	43,524	D
Other Information Services	519	318	76	-242	-76	0.28	-820	38,844	AA
Professional, Scientific, and Technical Services	541	10,794	11,945	1,151	11	1.09	-760	57,044	BA
Nursing and Residential Care Facilities	623	2,584	2,787	203	8	0.60	-16	24,232	AA
Social Assistance	624	2,448	2,651	203	8	0.77	-293	20,020	A
Forestry and Logging	113	11	4	-7	-64	--	-5	39,624	BA
Specialty Trade Contractors	238	6,702	6,981	279	4	1.05	-209	38,168	BA
Textile Mills	313	291	25	-266	-91	0.11	-145	40,924	D
Wood Product Manufacturing	321	87	56	-31	-36	0.09	-18	44,356	D
Printing and Related Support Activities	323	323	303	-20	-6	0.35	19	29,796	D
Plastics and Rubber Products Manufacturing	326	133	83	-50	-38	0.10	-35	48,880	D
Primary Metal Manufacturing	331	38	30	-8	-21	0.07	-6	38,428	D
Fabricated Metal Product Manufacturing	332	754	667	-87	-12	0.26	-116	46,436	D
Computer and Electronic Product Manufacturing	334	140	62	-78	-56	0.02	-67	54,860	D
Wholesale Electronic Markets and Agents and Brokers	425	1,108	605	-503	-45	0.43	-818	50,232	D
Electronics and Appliance Stores	443	941	902	-39	-4	1.06	-105	46,228	D
Gasoline Stations	447	961	970	9	1	0.74	48	19,396	BA
Miscellaneous Store Retailers	453	1,674	1,627	-47	-3	1.24	123	22,932	D
Air Transportation	481	163	139	-24	-15	0.18	-12	52,364	D
Truck Transportation	484	2,021	2,050	29	1	1.02	-80	40,248	BA
Scenic and Sightseeing Transportation	487	314	328	14	4	7.46	-7	21,840	BA
Motion Picture and Sound Recording Industries	512	229	254	25	11	0.51	17	24,284	BA
Waste Management and Remediation Services	562	568	439	-129	-23	0.93	-198	56,940	BA
Hospitals	622	7,372	6,261	-1,111	-15	0.93	-1,770	41,600	BA

3 star or fewer sectors		Employment		2003-2008 Change				2008 Average Annual Wage (\$)	Projected Growth
Industry	NAICS code	2003	2008	#	%	Location Quotient	Competitive Effect		
Performing Arts, Spectator Sports, and Related Industries	711	401	437	36	9	0.72	8	27,872	BA
Museums, Historical Sites, and Similar Institutions	712	539	441	-98	-18	2.43	-170	24,180	BA
Repair and Maintenance	811	1,827	1,869	42	2	1.07	49	32,656	BA
Crop Production	111	170	104	-66	-39	0.17	-60	19,292	
Food Manufacturing	311	413	349	-64	-15	0.17	-53	30,316	D
Furniture and Related Product Manufacturing	337	500	374	-126	-25	0.50	-46	34,788	D
Building Material and Garden Equipment and Supplies Dealers	444	2,207	2,073	-134	-6	1.15	-238	31,356	BA
Health and Personal Care Stores	446	1,381	1,388	7	1	0.94	-96	28,236	BA
Nonstore Retailers	454	398	313	-85	-21	0.51	-95	32,448	D
Warehousing and Storage	493	554	606	52	9	0.60	-108	32,604	BA
Private Households	814	685	610	-75	-11	0.79	-213	15,756	BA

Methodology and Sourcing

Projected Growth Grading Scale:

AA=above average

A=average

BA=below average

D=decline

Sectors are rated on 6 factors: 2003-2008 employment growth, 2003-2008 employment growth rate, location quotient, competitive effect, average annual wage, and projected growth.

Stars are based on: 2003-2008 employment growth of 100 or more, 2003-2008 employment growth rate greater than 13.6% (overall county job growth rate), location quotient of at least 1.25, competitive effect greater than 0, average annual wage greater than \$38,376 (2008 average for all jobs in the county), and average or above average projected growth.

Location Quotient: percentage of employment in the sector in the county divided by the percentage of employment in that sector in the US; gives an indication of how concentrated employment in the sector is in the county; based on 2008 data.

Competitive Effect: based on shift-share analysis; represents the change in employment in the sector in the county after accounting for overall US employment growth and growth/decline in the sector in the US.

Source: Bureau of Labor Statistics; projections based on data from EMSI and SC Department of Commerce.



South Carolina
Department of Commerce
1201 Main Street, Suite 1600
Columbia, SC 29201

(800) 868-7232
(803) 737-0400
www.sccommerce.com